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ABSTRACT

This collection, which was prepared to honor Edmund W. Gordon and Maynard C. Reynolds for their leadership at the Temple University Center for Research in Human Development and Education, represents the work of researchers from the Center on Education in the Inner Cities. It is organized around the four themes of educational resilience, student diversity, school-family-community connections, and ecological and contextual influences on children in inner cities. The following are included: (1) "Educational Resilience in Inner Cities" (Margaret C. Wang, Geneva D. Haertel, and Herbert J. Walberg); (2) "Influence of Kinship Social Support on the Parenting Experiences and Psychosocial Adjustment of African-American Adolescents" (Ronald D. Taylor, Robin Casten, and Susanne M. Flickinger); (3) "Turning around Five At-Risk Elementary Schools" (H. Jerome Freiberg, Neil Prokosch, Edward S. Treister, and Terri Stein); (4) "Investigating the Pedagogy of Poverty in Inner-City Middle-Level Classrooms" (Hersholt C. Waxman, Shwu-Yong L. Huang, and Yolanda N. Padron); (5) "Serving Students at the Margins" (Margaret C. Wang, Maynard C. Reynolds, and Herbert J. Walberg); (6) "Organizing Schools into Small Units: The Case for Educational Equity" (Diana Oxley); (7) "A School-University Partnership Working toward the Restructure of an Urban School and Community" (Andrea G. Zetlin and Elaine MacLeod); (8) "The Changing Politics of Federal Education Policy and Resource Allocation" (Kenneth K. Wong); (9) "Parent Programs: Past, Present, and Future" (Aquiles Iglesias); (10) "The Effectiveness of Collaborative School-Linked Services" (Margaret C. Wang, Geneva D. Haertel, and Herbert J. Walberg); (11) "Coordinated Services for Children: Designing Arks for Storms and Seas Unknown" (Robert L. Crowson and William L. Boyd); (12) "Determinants of Student Educational Expectations and Achievement: Race/Ethnicity and Gender Differences" (Leo C. Rigsby, Judith C. Stull, and Nancy Morse-Kelly); (13) "The Macroecology of Educational Outcomes" (David W. Bartelt); (14) "Racial and Economic Segregation and Educational Outcomes: One Tale--Two Cities" (William L. Yancey and Salvatore J. Saporito); and (15) "Post-Secondary Employment and Education Status of Inner-City Youth:

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Strategies for Improving Education in Urban Communities

A Collection of Articles
in Honor of

Edmund W. Gordon
Maynard C. Reynolds

from the

National Center on Education
in the Inner Cities

Strategies for Improving Education in Urban Communities

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June, 1996

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DEDICATION

This *festschrift* was prepared by friends and colleagues of Professors Edmund W. Gordon and Maynard C. Reynolds to honor them and recognize their many contributions to scholarship, public service, and educational practices that foster development and celebrate diversity. *Festschrift*, or "festival of writing," is a grand tradition of continental Europe to express gratitude to esteemed scholars. It is with enthusiasm and appreciation for this time-honored custom that we have prepared this volume as a tribute to Dr. Edmund W. Gordon and Dr. Maynard C. Reynolds. We cherish their sense of scholarly history, research acumen, insights into current educational practices and policies, and their vision for education and the social sciences in the 21st century.

Professor Edmund W. Gordon and Professor Maynard C. Reynolds have long contributed and continue to provide indispensable intellectual leadership to the community of researchers and practitioners at the Temple University Center for Research in Human Development and Education (CRHDE). Their ceaseless support and guidance have inspired us all. As colleagues, they have contributed to the design and evolution of a long-term program of research and productivity, in particular, the work of the National Center on Education in the Inner Cities (CEIC), a major program of research and development established by the U.S. Department of Education at CRHDE in 1990. Most recently, they played key roles in formulating the mission of the Mid-Atlantic Laboratory for Student Success (LSS), a new undertaking at CRHDE. Our work has been greatly strengthened by embracing their twin standards of scientific rigor and practice-sensitive approaches to educational research and scholarship.

This *festschrift* represents the work of CEIC researchers and their collaborating practitioners, many of whom are now embarking upon the prodigious challenges of the LSS. The chapters are organized around four themes that evolved during the scholarly careers of Edmund W. Gordon and Maynard C. Reynolds: educational resilience, student diversity, school-family-community connections, and ecological and contextual influences on inner-city children. Although only a partial measure of the range of theoretical and practical concerns Gordon and Reynolds have sought to address, these themes capture their enduring commitment to understanding human diversity.

Promoting Educational Resilience

Educational resilience is defined as the likelihood of schooling success among children and youth despite environmental adversities brought about by early conditions, experiences, or traits. Maynard Reynolds has devoted much of his scholarly career to children and youth who have greater-than-usual instructional needs. He championed the design of inclusive educational practices that accommodate student diversity and provide all students with educational experiences that foster learning and social skills and, ultimately, educational resilience. Edmund W. Gordon has long been a leading authority on nurturing and educating children from diverse economic, racial/ethnic, and cultural backgrounds who, for a variety of reasons, are in circumstances that place them at risk of school failure. Gordon argues that a number of factors influence the achievement of success in persons at risk, and that those who succeed do so through purposive and fortuitous orchestration of personal, environmental, and situational factors.

The chapters in this section include investigations of students and schools exposed to adversity. The theory and prior research guiding these investigations was informed by Gordon's and Reynolds' understandings of educational resilience. First, Wang, Haertel, and Walberg define educational resilience and review contemporary research and practice on fostering resilience in inner-city environments. Taylor, Casten, and Flickinger demonstrate how kinship networks offer support that aids in the psychosocial adjustment of African-American adolescents. Freiberg, Prokosch, Treister, and Stein describe how five "at risk" elementary schools attained unexpected levels of achievement despite students being exposed to highly adverse circumstances. Finally, Waxman, Huang, and Padron investigate educational practices in inner-city schools with high concentrations of students living in poverty, drawing implications for improved practice.

Responding to Student Diversity: Effective Practices and Policies

Students may be diverse with respect to socioeconomic status, gender, ethnicity, language, and prior educational, familial, and social experiences. Clearly, the challenge to educators is to provide the most responsive and powerful educational practices and policies for all students, without isolating groups of students from one another. Both Professors Gordon and Reynolds have produced seminal works on human diversity and its implications for practice. Gordon and Wilkerson's *Compensatory Education: Preschool through College* is considered a classic of human diversity and pedagogy. Likewise, Reynolds' *The Knowledge Base for the Beginning Teacher* is recognized by many as a milestone in teacher education.

The chapters in this section include Wang, Reynolds, and Walberg's discussion of policies and practical implications for an inclusive approach to implementing categorical programs serving children with special needs. Next, Oxley explicates the numerous benefits of organizing schools into smaller educational units to become more responsive to students' needs. The chapter by Zetlin and MacLeod describes a university partnership. Lastly, Wong's chapter recounts the history and current practice of categorical programs for diverse groups of students.

Forging School Connections with Family and Community

There is widespread agreement that the problems of children and youth who are at risk of educational failure cannot be tackled by schools alone. Rather, broader social policies must be established to unite the resources and expertise of the school, the family, and the community. School-family-community connections help overcome the problem of fragmented resources and harness the capacities of the school, family, and community.

The chapters in this section address school-linked family and community programs that enhance the lives of urban children. Iglesias describes parent education programs that help improve children's learning and psychological development and argues that such programs must be designed around the needs of the local community. Wang, Haertel, and Walberg analyze outcome research on school-linked family and community programs. Crowson and Boyd report on the difficulties faced by school staff in coordinating their work with that of other professionals involved in coordinated, school-linked service programs. Both Dr. Gordon and Dr. Reynolds have stressed that family, school, and community must hold similar expectations, express consonant values, and reinforce productive academic and social behaviors to foster healthy development in students.

Ecological and Contextual Factors that Impact on Inner-City Children and Families

Educators must work in coordination and collaboration with other service providers to foster the development and learning success for all students in our nation's schools. The fourth and final section of the festschrift provides insight into ecological and contextual factors that affect children, families, schools, and communities--including, for example, a community's employment rate, patterns of racial and economic segregation, and migration of residents. Understanding contextual factors is fundamental to improving children's learning and well-being. The impact of these less alterable factors on the development and learning of children and youth resonates throughout Professor Gordon's and Professor Reynolds' scholarship.

Rigsby, Stull, and Morse-Kelly begin this section with an analysis of the racial, ethnic, and gender differences in educational expectations and achievement. Bartelt overviews the macroecological factors impacting educational outcomes in urban schools. Yancey and Saporito analyze patterns of racial and economic segregation in two major urban centers and their impact on educational outcomes. Finally, Stull and Goetz analyze the employment patterns of inner-city youth in relation to education status.

A Final Note

This *festschrift* might be seen as a journey or grand tour of Professors Gordon and Reynolds' scholarly contributions. The four main sections of the book represent broad avenues of research that our honorees have traveled. In keeping with the metaphor, the chapters within each section are roads that carry forth the development of their major research ideas. Some of these roads intersect, while others forge ahead into new territory. As research continues on educational resilience, student diversity, school-family-community connections, and ecological and contextual influences on learning, new paths will always extend the original contributions of Professor Gordon and Professor Reynolds.

The work represented in this volume has been funded in part by the Office of Educational Research and Improvement (OERI) of the U.S Department of Education through a grant to the National Center on Education in the Inner Cities (CEIC) at Temple University Center for Research in Human Development and Education. However, it should be noted that the opinions expressed in this book do not necessarily reflect the position of the funding agency, and no official endorsement should be inferred. Special thanks are due to Dr. Oliver Moles, Center Liaison for CEIC at OERI, for his ongoing guidance and support. We would also like to express our appreciation to Sean O'Donnell and Jesse Shafer for providing editorial assistance during the preparation of this book.

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Part I

PROMOTING EDUCATIONAL RESILIENCE

One:

EDUCATIONAL RESILIENCE IN INNER CITIES

Margaret C. Wang, Geneva D. Haertel, and Herbert J. Walberg

INTRODUCTION

As the decade of the 1990s unfolds, the nation's attention has been captured by the plight of children and families in a variety of risk circumstances, and by the urgency for interventions that foster resilience and life chances of all children and youth. Problems of great severity exist for many children, youth, and families in this nation's major cities, particularly the inner-city communities. The quality of life available to children and families in these communities is threatened by a perilous set of modern morbidities that often involve poverty, lack of employment opportunities, disorderly and stressful environments, poor health care, children born by children, and highly fragmented patterns of service. Although intended as special resources for children, inner-city neighborhoods have fallen into physical and psychological despair, causing further erosion in students' lives and prospects.

In responding to such challenges, researchers are focusing on factors that strengthen the resources and protective mechanisms for fostering healthy development and learning success of children and youth in the inner cities. For the purposes of this chapter, educational resilience is defined as the heightened likelihood of success in school and in other life accomplishments, despite environmental adversities, brought about by early traits, conditions, and experiences.

The dual purposes of this chapter are to (a) briefly summarize the concept of resilience as it has been advanced in developmental psychopathology, and (b) discuss educationally relevant research consonant with our definition of educational resilience. Since educational theorists and practitioners are interested in alterable policies, the focus is on potentially malleable conditions within communities, homes, student peer groups, schools, and classrooms.

Resilience: A Productive Construct

Since the 1970s, developmental psychopathology (Cicchetti, 1990) has grown rapidly as a scientific discipline. It has provided an integrative framework for understanding maladaptation in children and adolescents. Topics of concern have included the roles of risk, competence, vulnerability, and protective factors. Each of these topics has been related to the onset and course of development of psychopathology.

Many of the contributions to the field of developmental psychopathology have been made by distinguished researchers in clinical psychology, psychiatry, and child development. These researchers provided early information documenting the phenomenon of psychosocial resilience in diverse, at-risk populations (Rolf, Masten, Cicchetti, Nuechterlein, & Weintraub, 1990). Among the at-risk populations studied are children with family histories of mental illness (Goldstein, 1990); of divorced parents (Wallerstein, 1983; Watt, Moorehead-Slaughter, Japzon, & Keller, 1990); exposed to high levels of maternal stress (Pianta, Egeland, & Sroufe, 1990); addicted to drugs (Newcomb & Bentler, 1990); born at medical risk (O'Dougherty & Wright, 1990); exposed to family violence (Straus, 1983); exposed to early parental death (Brown, Harris, & Bifulco, 1986); and in poverty (Garmezy, 1991).

These studies and many others led to a new developmental model of psychopathology that addresses both vulnerability and resistance to disorders and spanned the years from infancy through adulthood. The findings demonstrate that some children escape adversity without lasting damage. They provide a rich theoretical and empirical basis for new programs of educational research that can identify ways to foster and sustain the learning success of many at-risk students.

The contribution of studies of atypical, pathological, or psychopathological populations is clear. However, researchers are paying increasing attention to both atypical and typical patterns of development. Using results from the study of children who are at risk but able to "beat the odds" allows researchers to expand upon the developmental principles on which the theories of developmental psychopathology are based. Studies of at-risk populations, including those who "beat the odds," identify the many pathways that lead from childhood to adulthood. These studies identify which factors are most important to healthy development, for example, physical, socioemotional, cognitive, and environmental.

A New "Vocabulary of Risk"

As developmental psychopathology established itself as a new discipline, a "vocabulary of risk" emerged. Constructs such as vulnerability, protective factors, adaptations, and competence have provided the conceptual tools for ground-breaking work; they clarified and furthered our understanding of factors that enable individuals to successfully overcome adversities and challenges in development and learning. Within this exciting new field of study, the construct of "resilience" emerged.

Rutter (1990) defined "resilience" as the "positive pole of the ubiquitous phenomenon of individual differences in people's response to stress and adversity" (p. 181). Masten, Best, and Garmezy (1990) refer to the resilience phenomenon as the "capacity for or outcome of successful adaptation despite challenging or threatening circumstances" (p. 425). They further note that resilience concerns "behavioral adaptation usually defined as internal states of well-being or effective functioning in the environment or both. Protective factors moderate the effects of individual vulnerability or environmental hazards so that the adaptational trajectory is more positive than would be the case if the protective factor were not operational" (p. 426).

The field of prevention, where researchers and practitioners work to eliminate or at least delay the onset of problems such as alcohol and drug abuse, teenage pregnancy, delinquency, and school dropout, also employs this new vocabulary. These researchers and practitioners identify and describe "protective factors" and methods for building resilience in children and youth.

The Critical Role of Activity in Resilience

Why has the construct of resilience received so much attention over the past decade? The answer to this question is found in prospective studies that focus on individuals believed to be at high risk for developing particular difficulties: children exposed to neonatal stress, poverty, neglect, family violence, war, physical handicaps, and parental mental illness. These studies provide rich data bases from longitudinal studies that span several decades of new research aimed at identifying the processes underlying adaptation, successful trajectories, and pathways from childhood to adulthood.

As researchers gained insight into the risk factors that promoted the onset of a disorder, a puzzling but consistent phenomenon began to surface. Although a certain percentage of children in high-risk circumstances developed psychopathologies, a larger percentage did not develop disorders and became healthy and competent adults (Garmezy, 1991; Rutter, 1966, 1987; Watt et al., 1984). The often-reported statistic that only one out of four children born to alcoholic parents will become alcoholic (Benard, 1991) is a case in point.

The active role of the individual has been identified as an important factor in surviving stressful circumstances (Rutter, 1990). Individuals' responses to stressful circumstances vary, and what they do is the critical factor in whether they emerge successfully. Passivity in the face of adversity rarely provides the necessary information for an individual to develop strategies that can be useful in stressful conditions. The activity of resilient individuals serves as a self-righting mechanism that provides feedback that can be used to identify productive strategies in order to emerge unscathed from adversity.

Characteristics of Resilient Children

Resilient children, described by Garmezy (1974) as working and playing well and holding high expectations, have often been characterized using constructs such as locus of control, self-esteem, self-efficacy, and autonomy. A profile of resilient children that has emerged from the work of the Western Regional Center for Drug-Free Schools and Communities (Benard, 1991) includes such descriptors as strong interpersonal skills, a capacity to be responsive to others, a high level of activity, and flexibility. Resilient children were observed to perceive experiences constructively; they maintain healthy expectations, set goals, and have a clear sense of purpose about their future agency in controlling their own fate.

One construct that has shed some light on childhood resilience is "learned helplessness" (Seligman, 1975). Resilient children, as described in the research literature, rarely exhibit the passive behaviors associated with learned helplessness. Benard (1991) has concluded that resilient children's high expectations, belief that life has meaning, goal direction, personal agency, and interpersonal problem-solving skills coalesce into a particularly potent set of personal attributes. These attributes reduce the propensity of resilient children to exhibit the debilitating behaviors associated with learned helplessness. Seligman (1991) has recently published a new book entitled *Learned Optimism* that reviews research on the value of positive belief systems for life success. Although he does not address resilience directly, the behaviors and beliefs he describes are in concert with empirical findings on the psychosocial characteristics of children who overcame life adversities (i.e., resilient children).

A second line of research that sheds light on the psychosocial processes that promote resilience considers the coping mechanisms that individuals employ during stressful life events. Chess (1989) identified "adaptive distancing" as the psychological process whereby an individual can stand apart from distressed family members and friends in order to accomplish constructive goals and advance their psychological and social development. Adaptive distancing may be only one of a family of coping mechanisms that individuals employ as they successfully adapt to stressful events. Future research on resilience may provide empirical evidence of the types of coping mechanisms that resilient individuals employ.

Rutter (1990) and Chess and Thomas (1990) identified some of the adverse temperamental behaviors that children exhibit which can irritate caregivers and make the children targets of hostility. These behaviors include low regularity in eating and sleeping behaviors, low malleability, negative mood, and low fastidiousness. These attributes reduce a child's likelihood of receiving positive attention from adults. Even temperament, malleability, predictable behavior, mild-to-moderate emotional reactions, approaching rather than withdrawing from novel situations, and a sense of humor are attributes that protect children and produce affection and support from adults. Children in stressful life circumstances who have an easy temperament are more likely to receive the social support necessary for surviving adverse life events. Being female and in good health are two attributes that have also been associated with resilient children (Benard, 1991). Overall, social competence, good problem-solving skills, independence, and a clear sense of purpose are the critical attributes of resilient children (Masten et al., 1990).

These attributes of social competence, good problem-solving skills and communication, independence, and sense of purpose were also noted in the findings from a study of high-achieving students from economically disadvantaged homes in urban schools. Using the National Education Longitudinal Study (NELS) data base (U.S. Department of Education, 1988), Peng, Lee, Wang, and Walberg (1991) conducted a study to identify unique characteristics and experiences of urban students of low socioeconomic status (SES) whose combined reading and mathematics test scores were in the highest quartile on a national norm, i.e., resilient students. They found that 9.2% of low SES urban students were in this category. These students had self-concepts and educational aspirations and felt more internally controlled than nonresilient students. They also interacted more often with their parents and were more likely to attend schools where
learning is emphasized and students are encouraged to do their best.

Characteristics of Schools that Foster Student Resilience

Effective schools are powerful environments. Students can acquire resilience in educational environments that foster development and competence in achieving learning success. Effective educational practices have constituted a major research front since the mid-1970s (Cruickshank, 1990). School effectiveness has both macrolevel and microlevel dimensions. The macrolevel factors encompass the total school environment and related extraschool variables. Microlevel factors emphasize the effectiveness of classroom instruction, including replicable patterns of teacher behaviors and student achievement. Both school- and class-level effectiveness have been heavily researched.

Many definitions of effective urban schools have emerged from the extant research bases. The Carnegie Foundation for the Advancement of Teaching (1988) has advanced a definition of an effective urban school based on 15 criteria. These criteria, expressed as questions, are listed below:

- Does the school have clearly defined goals?
- Does the school evaluate the language proficiency of each student? What evidence is there that students are developing their communication skills, both oral and written?
- What are the number and types of books being read by students?
- Does the school have a core curriculum for all students? What is the general knowledge of students in such fields as history, geography, science, mathematics, literature, and the arts? Is such knowledge appropriately assessed?

- What is the enrollment pattern among the various educational programs at the school? Specifically, what is the distribution between remedial and academic courses?

- Is the school organized into small units to overcome anonymity among students and provide a close relationship between each student and a mentor?

- Are there flexible scheduling arrangements at the school?

- Is there a program that encourages students to take responsibility for helping each other learn and helps make the school a friendly and orderly place? How well is it succeeding?

- What teaching innovations have been introduced during the preceding academic year? Are there programs to reward teachers who exercise leadership?

- Does the school have a well-developed plan of renewal for teachers and administrators?

- Is the school clean, attractive, and well-equipped? Does it have adequate learning resources such as computers and a basic library? Can the school document that these resources are used by students and teachers to support effective learning?

- Are parents active in the school and kept informed about the progress of their children? Are there parent consultation sessions? How many parents participate in such programs?

- Does the school have connections with community institutions and outside agencies to enrich the learning possibilities of students?

- What are daily attendance and graduation rates at the school?

- What changes have occurred in the dropout rate, in students seeking postsecondary education, and in students getting jobs after graduation? What is being done to improve performance in these areas?

The program features included in these criteria on effective urban schools are plausible. Indeed, it might be difficult to defend the idea that they are desirable only for inner-city schools. They appear, in fact, to correspond well with an extensive content analysis of approximately 200 research reviews of effective educational policies and practices that apply to schools in general (Wang, Haertel, & Walberg, 1990). One of the challenges for research on urban schools is to identify ineffective policies and practices. From the point of view of scientific parsimony and educational efficacy, such research might frugally hypothesize that effective policies transcend location, ethnic group, social class, subject matter, grade level, etc. The burden of proof might then be placed on showing convincing differential policies, i.e., those that work consistently well in some settings but consistently poorly in others.

Among the most perplexing questions in designing innovative, research-based intervention programs for improving students' learning outcomes has been the relative importance of the multiplicity of distinct and interactive influences on student learning. Findings from a recently completed synthesis on variables important to learning document the multidimensional nature of school effectiveness (Wang, Haertel, & Walberg, 1991). Results indicate that the proximal variables, such as student cognitive and metacognitive processes, classroom management techniques, teacher-student interactions, and the home environment, had a stronger and more pervasive impact on school learning than distal variables, such as school and district policies, demographic characteristics, and state policies and programs.

Studies of effective teaching provide a rich source of data on the microlevel variables that contribute to school effectiveness. During the past 10 years, a number of research syntheses were published that identified effective instructional practices (Reynolds, 1982; Slavin & Madden, 1989; U.S. Department of Education, 1986; van de Grift, 1990; Wang, Haertel, & Walberg, 1990; Williams, Richmond, & Mason, 1986). The consistent characteristics that have emerged include degree of curriculum articulation and organization; maximized learning time; high expectations for student achievement; opportunity to respond; degree of classroom engagement; and student participation in setting goals, making learning decisions, and engaging in cooperative learning.

Many characteristics of effective schools emphasize the importance of a sense of student "involvement" and "belonging" that reduces feelings of alienation and disengagement. The more ways that a student feels attached to teachers, classmates, the school, and the instructional program, the more likely that participation in school functions as a protective shield against adverse circumstances. Student engagement and participation in school and classroom life promote self-esteem, autonomy, positive social interactions, and mastery of tasks. Perhaps more importantly, these positive outcomes have been shown to enhance life satisfaction and general well-being among urban teenagers (Maton, 1990).

Only a few studies have provided direct evidence on whether a particular set of school characteristics is effective in fostering resilience among students in inner-city schools. Many of the earlier studies conducted on effective schools found high levels of multicollinearity between desirable school characteristics and the SES characteristics of the communities being served (Stringfield & Teddlie, 1991). Characteristics of more effective schools were often associated with schools serving students from well-to-do neighborhoods. Some interesting alterable variables, however, have emerged from recent studies of the effects of urban schools.

In Phase III of the Louisiana School Effectiveness Study, 16 schools of varying SES levels were studied (Teddlie, Kirby, & Stringfield, 1989). These schools were classified as positive and negative outliers. Positive outlier schools were those that scored above their predicted achievement levels, while the negative outlier schools performed below their predicted achievement levels. The study documented variance in school, principal, and teacher activities within all SES levels. Greater achievement was obtained at schools that devoted a high percentage of time to tasks that made educational sense. The atmosphere was friendly in the schools that were performing at higher than expected levels of achievement, but principals and teachers protected the time spent on academic tasks and ensured that students' academic programs were well coordinated. Principals were very engaged in school events, remained active in the selection and retention of their faculties, valued high academic achievement, and supported the library in the life of the school. Teachers who achieved higher levels of academic attainment employed teaching methods that involved planning, clearly specified management and disciplinary rules, active teaching of higher order thinking skills, and providing direct instruction when appropriate. In successful schools, they also held high academic expectations.

Maughan (1988) used a multilevel, fixed-effects research design in a three-year study of school experience and psychosocial risk in 50 multiethnic junior high schools. The findings demonstrate that schools that were successful with socially and economically disadvantaged students enjoyed strong leadership, faculty input on decision making, esprit de corps among staff, and strong parental involvement. Effective schools were described as having physically and emotionally pleasant surroundings. Classrooms were well-managed, and instruction was stimulating. Children had a strong voice in choosing the kinds of instructional activities and classes in which they participated. These successful schools functioned effectively for both boys and girls, as well as across ethnic groups and social classes.

These findings were also noted in a study by Peng, Weishew, and Wang (1991). Using the NELS data base (U.S. Department of Education, 1988), they identified inner-city schools that had high achievement scores despite their disadvantaged circumstances, i.e., resilient schools that "beat the odds." The resilient schools in their study were found to be more orderly and structured than the low-achieving inner-city schools. Parents of students from the resilient schools held higher educational expectations for their children.

There is an optimism among educational researchers and practitioners about the possibility of implementing what is known from research and practical wisdom. When effectively implemented, effective strategies can shield children from the adversity that abounds in inner-city environments. In his compelling book entitled *Fifteen Thousand Hours*, psychiatrist Michael Rutter (1979a) argued that a school ethos of high expectations protects students against the debilitating effects of adversity. He found an important relationship between a school's characteristics and children's behavior problems. Problem behaviors decreased in schools designated as successful, and increased in unsuccessful schools. Variations in the rates of disruptive behavior were related to the ethos of the schools themselves. Thus, children living under conditions that are not supportive of psychosocial well-being may experience their school as a force for good or bad depending on the ethos of the school itself.

The review of research prepared by Benard (1991) also stressed the role that high expectations play in the development of resilience. Based on results of six major research studies, Benard reports that schools "...that establish high expectations for all kids--and give them the support necessary to achieve them--have incredibly high rates of academic success" (p. 11).

How a school remains effective is a question that has not received much attention. One of the disappointments of the school effectiveness movement has been the inability to maintain improved performance from year to year (Freiberg, 1989). Good and Brophy (1986) express this concern in reviewing the school effectiveness literature: ". . . the study of stability presents major technical and conceptual problems to those who study schools as organizational instructional units" (p. 587). Freiberg (1989) cites the work of Dworkin (1987) and Murnane (1975), who caution that variables associated with effective schools may differ in urban settings because student populations are very mobile--sometimes expanding, other times shrinking, but always changing. The positive effects of successful schools are amplified over time.

Research efforts to determine how schools become effective and how they maintain their effectiveness require recognition of the multidimensional nature of school effectiveness. Research on school effects, teaching practices, community and family influences, and student and teacher characteristics must be examined in order to understand how inner-city schools can support high performance and resilience in their students. The intimate and informed relations among students, their peers and families, and educators in private (especially parochial) schools, smaller schools, and schools of choice, may explain their appeal and apparent achievement advantages (Boyd & Walberg, 1990; Coleman & Hoffer, 1987; Fowler & Walberg, 1991).

Characteristics of Communities that Foster Resilience

Designing successful educational programs also requires examining the institutions that effectively provide for the education, health, and human services needs of local communities. The role of these institutions needs to be studied to determine if they prevent or facilitate the cycle of "at-risk-ness" that adversely affects development and learning.

Benard (1991) has identified three characteristics of communities that foster resilience. These characteristics are (a) availability of social organizations that provide an array of resources to residents; (b) consistent expression of social norms so that community members understand what constitutes desirable behavior; (c) and opportunities for children and youth to participate in the life of the community as valued members. Hill, Wise, and Shapiro (1989) emphasize the role of communities as key contributors in the revitalization of failing urban school systems. Hill, Wise, and Shapiro believe that troubled urban school systems can only recover when the communities that they serve unite in decisive efforts to improve their performance.

One of the clearest signs of a cohesive and supportive community is the presence of social organizations that provide for healthy human development (Garmezy, 1991). Health care organizations, child care services, job training opportunities, religious institutions, and recreational facilities are only some of the myriad of social organizations that serve human needs. In communities where there is a large, well-developed, and integrated network of social organizations, there are fewer social problems (Miller & Ohlin, 1985).

Communities that hold and express standards for good citizenship provide protective mechanisms for residents. This is recognized most clearly in studies that explore the importance of cultural norms on student alcohol and drug use (Bell, 1987; Long & Vaillant, 1989). Nettles (1991) analyzed the effectiveness of community-based programs available to African-American youth. She found that school-based clinics are only partially effective in reducing risk. Community-based programs that fostered resilience provided more social support and adult aid, gave concrete help on tasks, and provided opportunities for students to develop new interests and skills.

The role of religion and faith has also been identified as a protective factor for at-risk students. Masten and her associates (1990) identified both the beliefs based on abstract relationships with religious protective figures and the concrete relationships with members of the religious community as protective factors. Religious beliefs are helpful across ethnic groups and social classes, and provide standards and expectations to guide children's behavior.

Urban communities often lack a well-integrated network of social organizations for children and youth. The services provided by these organizations are often compartmentalized and fragmented. In their analysis of the impact of social policies on the quality of human resources available to African-American youth, Swanson and Spencer (1991) emphasize the dual importance of finding ways to reduce risk and making opportunities and resources available in order to break the negative chain reactions associated with adversity. Because schools have the most sustained contact with children and their families, public education officials should take into consideration, when designing their school improvement programs, the potential benefits of coordinating and integrating children's services across school and community organizations (Holtzman, 1991; Kirst & McLaughlin, 1990; National Center on Education in the Inner Cities, 1990).

Some promising new modes of cooperation are already being explored around the country. New coordinating agencies have been created in some cities, for example, out of the offices of city mayors and councils, working toward the coordinated involvement of businesses, labor unions, health-related resources, social agencies, and schools. But a number of these programs are quite new and are still seeking basic funding, leadership, and mechanisms for effective communication (Wang, 1991). Nevertheless, there is an emerging pattern of program design considerations across these new community enhancement models (National Center on Education in the Inner Cities, 1990). They include the following:

- Services needed by children, youth, and their families should be provided in a continuing fashion without artificial discontinuities. This suggests an important vertical coordinating function or coordination through time, as well as horizontal or cross-agency coordination.
- Definite strong provision must be made for staff to coordinate efforts across agencies. Such coordination requires time and effort.
- Agencies, including schools, must be ready to respond to leadership from various sources, not just the traditional "in-house" officer.
- There should be readiness to conduct services or programs in a variety of settings, going beyond traditional arrangements.
- Services are unlikely to be used unless there is very good communication concerning them. Basic information about programs must be spread in every community, and steps must be taken to inspire trust and confidence in the personnel and agencies involved.
- Opportunities should be sought to incorporate all kinds of community resources, including university resources and expertise in building community-school connections, especially through projects of a broad multidisciplinary and multiprofessional nature.

Fostering Resilience: A New Direction in Educational Research and Development

Research on resilience, in general, and on identifying ways to foster resilience, in particular, has generated new approaches to studying and designing effective schools in the inner cities. This new research focuses not only on identifying causes of risk and adversity, but on understanding the protective mechanisms that reduce risk and enhance success of all students.

Much of the current research focuses on the influence of ethnic and socioeconomic status of at-risk students on their learning and school achievement, as well as ways that at-risk populations differ from the mainstream. Lee, Winfield, and Wilson (1991), for example, found family characteristics to be an important differentiating factor between low- and high-achieving African-American students. Using the National Assessment of Educational Progress (NAEP) data sets (U.S. Department of Education, 1991), they found that higher achieving African-American students tend to come from higher social classes, and a higher proportion of higher achieving students have working mothers. In addition, these students are twice as likely, compared to their low-achieving counterparts, to attend Catholic schools (10% vs. 5%), and are somewhat more likely to come from urban areas.

Although schools make significant efforts to "remediate" or "compensate" for poor academic performance, many at-risk students still experience serious difficulties in achieving learning success. They need better help than they are now receiving. The prototypical remedial or compensatory education program often contributes to children's learning problems. As noted by Wang, Reynolds, and Walberg (1988), substantial evidence shows that students may actually receive inferior instruction when schools provide them with specially designed programs to meet their greater-than-usual learning needs. In many cases, selecting and tracking students for instruction in "specially designed" programs, based on certain perceived student differences, involves delivering radically different and not always appropriate content to some students (Allington & Johnston, 1986; Haynes & Jenkins, 1986; Oakes, 1986). There is a tendency to neglect fundamental content in these special programs, and to provide less instruction in higher order, advanced skills. For example, students with special needs are most likely pulled out of the regular reading classroom and receive drills in phonics, word attack skills, and vocabulary, whereas advantaged students are exposed to reading instruction that emphasizes comprehension and related higher order thought processes.

Similar experiences occur in mathematics instruction for low-achieving students and those considered at risk of failing or dropping out of school. Comprehension, problem solving, and higher order reasoning are less often emphasized in the instruction of these children. Classroom observational studies document that these students experience less instruction on higher order skills than their advantaged counterparts (Oakes, 1986). Furthermore, teachers tend to underestimate what students with special needs or those considered at risk can do. They tend to delay the introduction of more challenging work and not provide students with a motivating context for learning (Knapp & Turnbull, 1990).

Research studies on resilience should focus on the complex interrelationships that characterize the development and functioning of resilient individuals, and interventions that foster such patterns of resilience. Lewis (1991) pointed to the need for a paradigm shift, away from research focusing on a single precipitating event to the interaction of a multitude of factors influencing behavior. Research should also take into account the context of the individual (ecological models), rather than ignore the context; use relative terms to describe behaviors, rather than traits or characteristics; specify underlying mechanisms that promote resilience, rather than identify a list of attributes of resilient children; and provide interpretation, including personal reflections, on the part of the children being followed, rather than depend only on objective assessments.

To date, few researchers have studied inner-city children using a research model that searches for educational risk and protective factors. A better understanding of the lives and educational potential of children and youth in the inner cities can be achieved in part by studying resilient children, resilient schools, and communities that foster healthy behavior in residents.

The Role of the Family in Fostering Resilience

The quality of the caregiving environment is central to the development of resilience. In examining the impact of the environment on resilience, the role of the family is a logical starting place. Parents and families provide the first protective agents in the child's environment (Masten, Best, & Garmezy, 1990). They note that parents

> . . . nurture mastery motivation and self-esteem as well as physical growth. Parents provide information, learning opportunities, behavioral models, and connections to other resources. When these transactional protective processes are absent or are severely

> limited for prolonged periods, a child may be significantly handicapped in subsequent adaptation by low self-esteem, inadequate information or social know-how, a disinclination to learn or interact with the world, and a distrust of people as resources. (p. 438)

Studies of at-risk families seek to identify barriers that impede the development of children and features of the caregiving environment that fosters resilience. Fostering resilience in children requires family environments that are caring and structured, hold high expectations for children's behavior, and encourage participation in the life of the family. These characteristics are among the protective factors that can foster resilience (Benard, 1991). Most resilient children have at least one strong relationship with an adult (not always a parent), and this relationship diminishes risks associated with family discord. Receiving care and affection is critical throughout childhood and adolescence, but particularly during the first year of life (Rutter, 1979b; Werner & Smith, 1982).

Rutter (1990) documented the importance of good parent-child relationships in a review of data from short-term prospective studies, intergenerational studies of high-risk populations, and studies involving retrospective recall of adults. Results from all these studies provide evidence that secure and supportive personal attachments early in life make it likely that individuals will be protected against adversity in later life. Positive social relationships throughout life also provide benefits. Positive, intimate relationships correlate with a positive self-concept and can enhance the individual's worth within the social network.

The impact of caring and support is exemplified in Rutter's (1979b) study of discordant families. Of children from discordant families, 75% exhibited conduct disorders when they failed to have a positive relationship with either parent, as compared to 25% when children maintained a good relationship with at least one parent. In their review of studies of competence under stress, Masten, Best, and Garmezy (1991) provided evidence that family instability and disorganization predicted school disruptiveness. Children whose families had a history of marital instability and frequent moves were more often rated as disruptive by peers and teachers. However, in contrast to these conclusions, there is some evidence that the stress produced in discordant families can be mitigated. Benard (1991) found that even though divorce produces stress, the availability of social support from family and community can reduce stress and yield positive outcomes.

A topic of research that has received more attention recently is the impact of mobility on children's lives. Recent statistics provided by the U.S. Department of Commerce (1987) documented that 19% of the nation's school-aged children move in a single year. Lash and Kirkpatrick (1990) report that some of these moves are the result of seasonal jobs (e.g., migrant farm workers), some reflect job or military transfers, and others are due to divorce and financial instability. Migration has shown to be a serious and pervasive risk factor for student learning among poor and minority children, as revealed by two large national surveys (Long, 1975; Straits, 1987). Moving generally keeps children of lower SES from attaining their normally expected achievement and grade level.

The effect of mobility is particularly large in one case. Moving from a community of lower SES to one of higher SES often results in substantial grade retardation of lower SES children (although it does not appear to affect middle SES children as much or at all). Early grade retardation is important, because it forecasts further retardation, poor achievement, and dropping out--a phenomenon known as the "Matthew effects" (Walberg, 1984; Wang, 1990).

Perhaps the most pressing problems facing inner-city families are the problems faced by the adolescents in the community--behavior problems, substance abuse, academic underachievement, and teenage pregnancy. The intervention literature strongly suggests that these problems cannot be addressed without direct involvement of the family (Liddle, 1991; Benard, 1991). The solution to many of these problems lies within the family.

Garmezy (1985) established the importance of several family-related variables in protecting children against adversity. These variables include family cohesion, family warmth, and the absence of discord. A supportive family environment is important to the development of resilience. In addition to holding high expectations of children (i.e., that they will succeed in school and become good citizens in their community), households that are structured and employ consistent discipline, rules, and regulations produce better outcomes among children from at-risk families (Bennett, Wolin, & Reiss, 1988). Masten et al. (1990) related poor household maintenance and housekeeping to disruptiveness in school.

Benard (1991) points to the importance of children's participation in family and household activities in fostering resiliency. Benard cites the work of Werner and Smith (1982), who emphasized the value of assigned chores, caring for brothers and sisters, and the contribution of part-time work in supporting the family. These behaviors help establish that children can truly contribute and improve their circumstances. Helping behaviors on the part of children enhance their self-esteem and ultimately foster resilience.

Family Involvement with Schools. The importance of family involvement in enhancing children's school performance has been consistently documented (Chan, 1987; Epstein, 1984; Moles, 1982). Families' involvement has been found to facilitate increased communication between schools and homes. The active participation of family members in students' learning has improved student achievement, increased school attendance, decreased student dropouts, decreased delinquency, and reduced pregnancy rates. These results are present regardless of racial, ethnic, or social class membership (Peterson, 1989).

A series of research syntheses reported by Graue, Weinstein, and Walberg (1983) and Iverson and Walberg (1982) provided strong evidence that school-based family involvement programs work, and that there is a significant correlation between school achievement and features of the home environment. Furthermore, parents who participate in family involvement programs were found to feel better about themselves and more likely to enroll in courses that advance their own education (Flaxman & Inger, 1991). However, based on data drawn from the NELS study of eighth graders in 1988 (U.S. Department of Education), Peng and Lee (1991) found that direct parental involvement and assistance are not as important as the availability of learning opportunities, frequent parent-child conversations, and higher education expectations. Furthermore, they found that having more family rules without complementary support does not relate to higher achievement.

Educational intervention programs designed to involve family members are also significantly more effective than programs aimed exclusively at students (Walberg, 1984; Weikart, Epstein, Schweinhart, & Bond, 1978). A research study on direct parental involvement was conducted by Comer (1986) in a low-performing school that ranked 32 out of 33 in New Haven, Connecticut. Using strategies for parent involvement over several years, the same school, populated by at-risk students, improved its rank to third out of 26 schools. Similar results have been attained with other low-performing schools. Comer attributes results to the success of management teams involving parents, parent-developed workshops, parent involvement in tutoring programs for children, and parents' assisting teachers in planning classroom activities.

Epstein (1987) developed a theory of family-school connections after recognizing four important microsystems that impact the development of children, families, peer groups, schools, and neighborhood/communities. The degree of overlap among these microsystems represents the extent to which they share values, goals, and understandings of the social and cultural processes governing everyday life. The greater the overlap among domains, the more common their cultures and structures. Generally, there is some evidence and strong logic behind an argument that the greater the overlap among microsystems, the more consistent their joint impact on the developing person. When the home, the school, peers, and the larger community are working together, the greater their impact is in a consistent direction.

Several types of family involvement programs are being implemented by schools across the country. Some programs involve families directly in school management and "choice" and encourage parents' actual presence in the school. Others are focused on training families in communication skills and helping their children to develop good study habits and high expectations. Still others focus on family resource and support programs. These programs provide a host of direct services to families and children. They may involve home visits, job training, career counseling, health care, mental health, and social support services (Wang, Haertel, and Walberg, 1992).

The Role of Teachers in Fostering Resilience

The importance of external support systems as protective mechanisms that enable children to cope under adverse conditions has been stressed in the literature on childhood resilience. Teachers can play an important role in reducing stress by providing the positive supports needed by children in adverse conditions. The contribution of teachers has been documented in the words of the children of Kauai who took part in Werner's (1989) longitudinal study of the long-term effects of prenatal and perinatal stress. Of the 142 high-risk children identified in her study, 72 "beat the odds" and became competent, successful adults. Describing these "resilient" children as "easy-going" and "even-tempered," teachers praised the students' problem-solving abilities and competence in reading. The school became a home away from home for the children; it was a refuge from a chaotic home life. Favorite teachers became role models in whom the children confided when their own family was threatened by dissolution.

The value of teachers providing concern and support is also described by Benard (1991), who quotes Noddings (1988):

> At a time when the traditional structures of caring have deteriorated, schools must become places where teachers and students live together, talk with each other, take delight in each other's company. My guess is that when schools focus on what really matters in life, the cognitive ends we now pursue so painfully and artificially will be achieved somewhat more naturally. . . . It is obvious that children will work harder and do things--even odd things like adding fractions for people they love and trust. (p. 32)

In their study of public and private high schools, Coleman and Hoffer (1987) point to the role of caring and engaging teachers in helping high school students develop the values and attitudes necessary for persevering in their schoolwork and achieving high grades. They stress the importance of the personal relationships among teachers and students--sustained, inter-generational, intimate relationships of moderate intensity that support students' academic and social endeavors.

A major risk factor that contributes to learning problems encountered by students, particularly in inner-city schools serving students from diverse ethnic and cultural backgrounds, is the disconnection between schooling experience and family life. Among some of the most critical facilitating factors ameliorating this problem of disconnection are teachers' sensitivity to student diversity and their ability to provide learning experiences that are responsive to individual differences. Effective teachers serve to reduce vulnerability and stress and use a variety of strategies to ensure the personal and academic competence of their students.

Students bring to the learning situation a diversity of cultural and language backgrounds and prior knowledge. These differences may be important sources of variation on how and what students learn. How students interact with the classroom and school environment and the demands for school learning can limit or enhance the students' access to learning resources and, therefore, learning success. Effective teachers play an important mediating function in minimizing "risk" or vulnerability and maximizing resources that can serve to enhance student development and promote resilience.

Campione and Armbruster (1985) point out that children with excellent comprehension skills usually relate new information to their personal experiences. Differences in prior knowledge may be the product of cultural differences. These differences may be important sources of variation in students' strategy use and in their learning outcomes. Students from culturally diverse backgrounds may not only have difficulty accessing background knowledge, they may also have knowledge deficits. They may not be able to access prerequisite prior knowledge without help from teachers. This lack of background knowledge is sometimes remediated by using culturally relevant texts and materials. Palincsar and Klenk (1991) recommend that teachers use universal themes with which all students can identify as a method to make new content more easily accessible. Effective teachers who are familiar with the types of background experiences students bring to the classroom not only select materials that are culturally relevant, but make it easier for the students to relate to their classroom experience and to access their prior knowledge.

Recently Ogbu (1992) identified several ways that teachers can help at-risk children with cultural and language difficulties perform in school. He recommends that teachers learn about students' cultural backgrounds and use the knowledge to organize their classrooms and instructional programs. Teachers can gather information about the cultural backgrounds of at-risk students through (a) observing students' behaviors; (b) asking students and their families questions about their cultural practices; (c) conducting research on ethnic groups in the school setting; (d) and reviewing published research on children from different cultural groups. The information teachers gather can then be used to design and implement instructional programs, to help students get along with each other, and to improve communication among school staff and students' families.

In all cases, however, recognition of cultural diversity, which can foster resilience, must be based on actual knowledge of different cultural groups and how these cultures differ from the mainstream culture. According to Ogbu, teachers can increase the success of interventions by recognizing whether the cultural frame of reference of an at-risk minority is oppositional to the cultural frame of reference of mainstream American culture. Without taking these differences into account, teachers will be less able to increase learning and self-esteem among at-risk students. If at-risk students are immersed in a culture which has an oppositional framework to the mainstream culture, they may be less inclined to communicate with school personnel and peers from different ethnic groups and are likely to participate less fully in the life of the school.

Teachers effective in responding to student diversity also acknowledge the importance of individual difference variables in their planning and interactions with students. They use a variety of strategies in creating classroom learning environments that maximize each student's opportunities for learning success (Corno & Snow, 1986; Wang, 1990; Wang & Walberg, 1985). Below is a list of some of the methods identified by Corno and Snow (1986) that teachers use to adapt instruction to student differences to ensure the learning success of every child.

- Manipulate classroom organizational structures, such as the use of short-term, nonstigmatizing groups, learning centers, and reward structures.

- Vary the use of materials that present new information and support problem-solving, including varying the amount of time spent on reviewing previously learned materials, the number of examples used to provide further explanation and illustration, the use of summaries, points of emphasis, and modeling.

- Vary the types of support materials used, including aides, peer tutoring, a variety of media, and other methods.

- Vary the amount of instructional support and available time for learning to accommodate the needs of the individual student.

- Vary the level, form, and number of questions asked. Ask more higher order questions so that students must go beyond the material they were presented.

- Vary the nature and amount of reinforcement given for correct answers, as well as the level of information provided when a student gives an incorrect answer.

- Enhance the students' use of inquiry processes by implementing "inductive teaching" strategies.

- Vary the ways information is presented during instruction to prompt students to give their own examples of new principles or content learned.

- Facilitate students' use of self-regulating techniques, such as self-monitoring or self-reinforcement, by providing a variety of problem-solving opportunities in the classroom instruction-learning process.

The role of instructional mediation has been identified as an important resource for students, particularly those from diverse cultural backgrounds and/or those requiring greater-than-usual instructional support. Different instructional activities place different cognitive demands on students and can alter their information-processing burden. Learning complicated material is difficult and requires a variety of mental resources, including cognitive processing of the new information and metacognitive activity. Instruction mediates student cognition. As instruction bears more of the information-processing burden, a student's general intellectual abilities are less critical. Little instructional mediation provides many opportunities for students to discover more principles and concepts themselves. An example of more instructional mediation might involve the use of teachers modeling cognitive skills. In this case, the teacher provides a model of expert performance, giving novice learners an opportunity to see how new problems are solved. Examples of teachers modeling powerful thinking strategies include teachers thinking aloud as they read a text; talking aloud as they solve a mathematics problem; and allowing students to watch them plan and revise an essay (Means & Knapp, 1991).

Expert scaffolding is another technique that has been shown to be effective in enabling students to handle a complex task by the teacher providing guided practice (Collins, Brown, & Newman, 1990). Both the use of mediated instructional techniques and expert scaffolding have been found particularly effective with students with special needs or those otherwise considered to be at risk (Corno & Snow, 1986; Feurstein, 1980; Means & Knapp, 1991).

In addition to providing supportive instruction, effective teachers serve to foster resilience by finding ways to promote self-concept and self-responsibility for active learning (Wang & Palincsar, 1989). As Bandura (1977, 1982) explicated in his cognitive theory of self-efficacy or perceived self-competence, self-efficacy is best promoted through mastery of new experiences. When students become convinced they are instrumental in their learning success, they work harder to overcome difficulties.

Students develop information about their own efficacy from several sources, including (a) memories of similar past experiences; (b) watching peers, teachers, and others master a task; (c) attending to their own level of motivation and interest in the task; (d) and persuasion and exhortation by others (Winne, 1991). These sources help students develop expectations for their own success. Teachers can foster resilience by providing students with opportunities to set realistic expectations, and by helping them master new experiences. Teachers who work to develop their students' ability to be active learners help strengthen students' ability to overcome adversity.

The role of mentoring has evolved during the past decade and many school reformers believe it to be a powerful intervention. This belief is based in part on the work of researchers such as Lefkowitz (1986), who highlighted the role of caring adults in fostering resilience. Lefkowitz reported that the majority of 500 at-risk youths identified a caring adult as contributing strongly to their success. Mentoring programs in schools have been developed to address problems such as school dropouts, school-to-school transitions, school-to-work transitions, drug and alcohol use, teen pregnancy and parenting skills and family literacy (Benard, 1992). Typically, these programs have involved not only teachers, but a variety of school personnel and community members. Nevertheless, in schools, teachers play a key role in providing empathic support to pupils and in assisting students to set achievable goals; two behaviors involved in successful mentoring. Although many educators have regarded mentoring as a successful intervention that can contribute to programs designed to break the cycle of disadvantage, Benard (1992) cautions that the long-term effectiveness of planned mentoring programs has not yet been established. The effectiveness of spontaneous mentoring versus planned mentoring needs to be further explored. However, teachers are in frequent contact with students and along with other adults in the school environment can be encouraged to be supportive and caring to students, and thus promote resilience.

The Role of Peer Support in Fostering Resilience

The academic achievement of at-risk students is the product not only of a child's intellectual ability, but also the school's climate and the social support networks available from families. Clark (1991) states that after the family, peers are the most important source of support. Social support networks from peers provide children and adolescents with a sense of being valued, cared for, and loved. These support networks not only facilitate the development of an individual, but serve as a protective shield against stress. Peers, family, and the school support system can all provide protection.

Coleman and Hoffer (1987) describe how students in boarding schools are supportive of their friends when their families disengage. Other strong support for the influence of peers is that the use of cooperative learning strategies is the single most effective school-based intervention for reducing alcohol and drug use (Bangert-Downs, 1988). Similarly, Watt et al. (1990) provide evidence that children of divorced parents find respite from stressful home situations through an external social network that allows them to distance themselves from stressed parents ("adaptive distancing"). The school performance of children of divorce is affected by the peer social network in which they participate, more so than the school performance of children from intact homes. Children of divorce find companionship, love, self-esteem, and care from school friends to a greater degree than children from intact homes.

Research also suggests that peers have a significant impact on a student's self-perceived academic competence and attitude toward school. Cauce (1986) found that the peer group's attitude toward school was a significant predictor of grades, achievement test scores, value placed on being a good student, and perceived competence. Patchen (1982) also found that students with peers who valued high achievement spent more time on homework, finished more of their homework assignments, attended school more regularly, were tardy less often, and missed class without permission fewer times.

Peers exert significant influence on students. Opportunities to interact with students who have high achievement motivation, positive attitudes toward school, and a positive academic self-concept are beneficial to students who are considered at risk or require special or compensatory education programs. Mentoring programs, cooperative learning programs, cross-age tutoring, use of small learning groups, and extracurricular activities provide mechanisms for children and youth to develop positive peer relationships and stronger support networks that serve as a protective process to foster resilience.

CONCLUSION AND FUTURE DIRECTIONS

The meaning of the term "resilience" offers a provocative challenge to educational researchers and practitioners. In a single word, it can suggest several useful notions and priorities. For educators, the term "resilience" suggests the potential benefits of early experience; the need to mitigate adverse subsequent circumstances; and the importance of educationally important and alterable risk and protective factors in communities, homes, peer groups, schools, and classrooms. For educational researchers, it offers the intriguing hypothesis that early alterable (possibly sustained) conditions fortify students to persist successfully through inevitable and endemic difficulties.

The construct of resilience has been studied for nearly two decades by psychiatrists, clinical psychologists, developmental psychologists, and other mental health professionals. Originally, their research focused on identifying the characteristics and attributes of children who were resilient. Over time, the focus of this research shifted to determining the protective mechanisms and processes that foster resilience.

A parallel development emerged in educational research in the 1980s. Researchers began to recognize that, like children who "beat the odds" in the developmental psychopathology data base, some schools have been more effective in achieving higher levels of learning success of their students than would be expected, given their multiple risk factors. These schools had high achievement gains despite serving impoverished families and communities with multiple adversities and few resources.

The rich research bases of developmental psychopathology and effective instruction and school effects can help identify educational practices that inspire and sustain achievement of all students, including and especially those considered to be at risk. The research bases can also help identify school/community connections that serve to mobilize resources, promote positive attitudes and behavior that strengthen the enabling role of families, and ensure student learning success. These lines of research point to characteristics of successful inner-city schools; the process by which unsuccessful inner-city schools are turned around; ways to create protective mechanisms and resources in inner cities to ensure student outcomes; and analysis of the schools' programs, climate, ethos, teachers, and other salient features, to determine biological, psychological, and environmental sources on resilience (National Center on Education in the Inner Cities, 1990).

New research that addresses the concern of factors influencing educational resilience and ways to foster educational resilience is beginning to emerge. It can develop a better understanding of student diversity by studying children who perform at the margins of achievement, and using sophisticated statistical techniques such as data envelopment analysis to identify efficient and effective schools. Along with research on resilient children and schools, there has also been an increase in research on the role of communities in fostering competence and resilience. New research studies aiming to better understand the ecology of cities point to the many factors--economic, political, and sociological--that influence inner-city educational outcomes. Attention is also being paid to the ways to coordinate school and community services in order to make a more integrated network of resources and protective mechanisms available to children and their families.

Considerable educational research on school learning and other educational outcomes is consonant with the concept of resilience advanced in studies of developmental psychopathology. In the absence of definitive research, however, it may be reasonable for educators to focus on the implications of intervention studies that will provide direct evidence for understanding educational resilience and the mechanisms for fostering it. It seems imperative and urgent for researchers to probe the validity and extent of the idea over extended periods of time. By definition, resilience implies longitudinal studies of critical segments of the life course.

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Two:

INFLUENCE OF KINSHIP SOCIAL SUPPORT ON THE PARENTING EXPERIENCES AND PSYCHOSOCIAL ADJUSTMENT OF AFRICAN-AMERICAN ADOLESCENTS

Ronald D. Taylor, Robin Casten, and Susanne M. Flickinger

INTRODUCTION

In the literature on African-American families, the importance of extended families and kinship relations as culturally distinctive features of family life has been discussed extensively (Aschenbrenner, 1973; Billingsley, 1968; Hill, 1977; Shimkin, Shimkin, & Frate, 1978; Tienda & Angel, 1982; Wilson, 1986, 1989). This work is important because it has contributed the growing understanding that the nuclear family model is not the only family form that exists, and that other family forms are neither lacking nor deviant. Unfortunately, however, empirical work examining the role of kinship relations in African-American family functioning is scarce.

Kinship Relations and Adjustment

The available empirical work on kinship relations reveals the following. (a) Child and adult adjustment benefits from the availability of an extended kin network (Dressler, 1985; Kellam, Adams, Brown, & Ensminger, 1982). (b) Kinship support is especially beneficial for single-parent households and adolescent mothers. Specifically, the quality of child care tends to increase when extended kin are involved in the care of children (Hetherington, Cox, & Cox, 1978; Kellam, Ensminger, & Turner, 1977). Also, African-American teenage mothers display more adequate parenting and better adjustment when assistance from kin is available (Colleta, 1981; Furstenberg & Crawford, 1978). (c) Kinship networks may directly influence the socialization of children. Recent research (e.g., Hale, 1982; McAdoo, 1981; Tolson & Wilson, 1990) has shown that extended kin, especially grandmothers, play a substantial role in the parenting of children.

A Mediating Role for Authoritative Parenting

Although empirical work reveals that kinship support is positively linked to adjustment in families, the manner in which kin assistance has its positive effects remains unclear. It may be that the positive effects of kinship support on adjustment are mediated by the effects of parenting practices on adjustment. As the earlier review indicates, kinship support is positively linked to more adequate parenting practices. In recent research it has been shown that particular styles of parenting are positively associated with adolescent adjustment. Specifically, work (e.g., Steinberg, Mounts, Lamborn, & Dornbusch 1991) has shown that across ethnic and social class groups, authoritative parenting practices are associated with adolescents' positive adjustment. Authoritative parenting has also been linked positively to adolescents' competence in school (Steinberg, Elmen, & Mounts, 1989). Authoritative parenting involves a set of parenting practices involving warmth, acceptance, demands for mature behavior and autonomy, and firm behavioral control (Baumrind, 1967; Steinberg, 1990a).

The parenting practices making up authoritative parenting may be enhanced by kinship social support. To the extent that families can depend on kin for such functions as socialization and entertainment, advice and counseling, and problem solving, behaviors that make up authoritative parenting (warmth and affection, maturity demands, firm behavioral control) seem more likely. Adolescents are more likely-to perceive warmth and affection from their parents to the extent that their parents can depend on support both within and beyond the immediate family. Other positive forms of parenting such as demands for maturity and autonomy and behavioral control are probably more likely when parents can rely on such forms of assistance as advice, counseling, and problem solving from kin. If kinship support is positively associated with an authoritative style of parenting and authoritative parenting is positively linked to adjustment, then the effects of kinship support on adjustment may be mediated by its effects on parenting practices.

Conceptual Model and Predictions

In the conceptual model conceived and tested in this investigation, a two-step process links kinship relations and support with adolescent adjustment. In the first step of the model, kinship support enhances authoritative parenting practices. In the second step, authoritative parenting practices positively affect adolescent adjustment. According to the model, the effects of kinship support on adolescent adjustment are mediated by the association of kinship support with authoritative parenting practices. The conceptual model leads to four predictions examined in the investigation. First, it was expected that kinship support would be positively associated with adolescent adjustment. Second, it was predicted that kinship social support would be positively linked to authoritative parenting practices. Third, we predicted a positive association between authoritative parenting practices and adolescent adjustment. Finally, it was expected that the effects of kinship support on adjustment would be mediated by the association of authoritative parenting practices with adjustment.

Single- and Two-Parent Families

Because single-parent families compared with two-parent families may be in greater need of social support, the assistance offered by kin may have a greater impact on single-parent family functioning. Indeed, research reviewed above suggests that the child care and parenting practices in single-parent households are especially likely to be influenced by kinship support. Therefore, the direction of the relations among the variables was expected to be similar for the adolescents from one- and two-parent households. The only difference expected was that the strength of the relations between kinship support, adolescent adjustment, and authoritative parenting practices should be stronger for single-parent households.

Method

Sample

The sample for the study is composed of 165 African-American adolescents (70 boys and 95 girls) in grades 9-12 (seniors = 76, juniors = 22, sophomores = 31, freshmen = 36) attending a large predominantly African-American (89%) public high school in a large northeastern city. The total enrollment at the school is over 1,200 students. All students at the school have as their first class a counseling and advisory period. We chose students for participation in the investigation by randomly selecting advisory classes. Of the 186 students initially selected, 21 either declined participation or did not complete enough of the measures for their scores to be included in the data analyses. We examined for comparative purposes the portions of the questionnaire completed by all of the participants, which included some demographic data (age, sex, and grade) and some information on school performance. The youngsters who did not complete the questionnaire did not differ from those who did on any of these measures.

Student data provided by the school district indicates that 60.1% of the youngsters are from economically disadvantaged homes. We employed parental education as a measure of socioeconomic status (SES) because recent evidence suggests that of the indices of class (i.e., occupation, income, and education) education may be the most stable feature of a family's class status (Featherman, Spenner, & Tsunematsu, 1988). For adolescents in single-parent households, we used the education of the single parent, while for those in two-parent homes we averaged the education of both parents. The parents of the students in our sample on average had completed high school. In terms of family structure, 44 (27%) of the students were from two-parent, biologically intact households; 81 (49%) were from single-parent, female-headed households; 40 (24%) were in other family arrangements (e.g., stepfamilies, living with relatives, or foster care). In the present analyses, we compared the students from two-parent households with those from single-parent households. The 40 adolescents in living arrangements other than either living with both biological parents or living with their single biological parent were not included in our analyses.

Procedure

Data on relations with kin, family relations, and psychosocial adjustment were collected through questionnaires administered to the adolescents during school. Students also provided demographic information concerning parental education (as an index of SES) and household composition (as an index of family structure).

Measures

Kinship Relations. The measure of kinship relations consisted of a series of questions taken from Steinberg (1990b), and some were developed for the present study. The measure assessed the adolescents' perceptions of their families' relations with adult kin. The respondents were informed that they would be asked questions concerning their relations with adult relatives, "people like your grandparents, your aunts or uncles, or other adult relatives." The measure examined (a) the frequency of contact with kin, (b) the number of kin living within an hour of the adolescents' residence, and (c) the adolescents' endorsement of statements examining the degree of social and emotional support offered by adult relatives. The questions assessing social and emotional support examined the areas including socialization and entertainment, advice and counseling, and problem solving. The questions assessing these three areas of *social support* were summed to yield a single measure of *kin social support*, and it was this scale that was used in the analyses. The kin social support measure consisted of 13 questions, with $\alpha = .72$ (see Appendix). The respondents indicated their answers using a Likert-type response scale ranging from 4 = *strongly agree* to 1 = *strongly disagree*. Several sample questions included, "One of the good things in life for me is to talk and have fun with my relatives"; "We often get together with our relatives for reunions or holiday celebrations" (socialization and entertainment); "When we have to make important family decisions, we ask our relatives for advice" (advice and counseling); or "We can count on our relatives for help when we have problems" (problem solving). The questions on social and emotional support focus on two areas: (a) adolescent's personal satisfaction with the support of their kin; and (b) the adolescent's knowledge of the explicit behavior of kin in offering help, and the actions of their family in seeking assistance from kin. We focus on these two areas because they represent simple areas of knowledge that should be easily accessible to the adolescents and should reflect on socially support behaviors displayed by kin. Using this type of information avoids having the adolescent interpret the psychological meaning of kin assistance for other members of their family.

We relied upon the adolescents' assessment of kinship support for several reasons. First, the participation of parents or guardians of the adolescents was exceedingly difficult to obtain. Even with offers of financial remuneration and the option of conducting the interviews in a variety of methods (e.g., at the respondents' homes, at our research site, or over the phone) the rate of participation was far too low to conduct meaningful analyses. Some of the reasons for the difficulty in recruiting parents or guardians included the lack of correct addresses from "current" school records, parents with multiple jobs, repeated family crises, disconnected phones, etc. It is probable that these difficulties are both directly and indirectly linked to the economically disadvantaged status of the families in our sample. Although our measure of SES is not exact enough to allow verification, we suspect that many families in our sample could be classified as among the working poor.

A second reason for relying on adolescent reports was that research has shown that ratings or reports on behavior and personality by knowledgeable informants tend to converge with reports based on objective observations and behavior counts (e.g., Moskowitz & Schwarz, 1982). Research has also shown that adolescents are no less capable as reporters on parental child rearing behavior than parents (Schwartz, Barton-Henry, & Pruzinsky, 1985). If adolescents are able to act as knowledgeable informants on parental behavior there is little reason to believe they should be less capable of reporting on the behavior of kin. Indeed, in preliminary findings from a recent study (Taylor & Roberts, 1992) involving a smaller though demographically similar population, we have found a correlation of .85 between parental and adolescent reports of kinship social support. This finding, though preliminary and based on a more extensive measure of kinship relations, nonetheless suggests that parents' and adolescents' reports of kinship support are highly similar[1].

Parenting Practices. The revised short form of the *Child's Report of Parental Behavior Inventory* (CRPBI, Schludermann & Schludermann, 1970) was used to assess three aspects of parental disciplinary practices: Acceptance, Psychological Control (vs. Psychological Autonomy), and Lax Control (vs. Firm Control). The CRPBI is a widely used Likert-scale format, self-report measure of adolescents' characterization of the parents' discipline practices. The Acceptance subscale (10 items, $\alpha = .87$) consists of questions on parental acceptance and closeness to the adolescents. The Psychological Control subscale (10 items, $\alpha = .80$) consists of items assessing parents' use of anxiety or guilt induction as a method of control. The measure of Psychological Control was coded so that high scores on the scale represent the adolescents' perceptions that their parents encourage their psychological autonomy. The items of the Lax Control subscale (10 items. α = .74) measure the extent to which parents regulate and monitor the adolescents' activities and conduct on a consistent basis. The measure of Lax Control was coded so that high scores on the scale represent the adolescents' perceptions that their parents exert Firm Control over their behavior. Along with the alpha coefficients presented above, Schwartz, Barton-Henry, & Pruzinsky (1985) have shown the convergent and discriminant validity of the scales. In the present analysis, the scores for mother and father from adolescents from two-parent homes was averaged; for adolescents living only with their mother, scores for that relationship were used. We averaged the scores reported for mothers and fathers in two-parent homes because we believe that the combined influences of both parents more accurately characterize the parenting experiences of the adolescents. Using only the scores reported for mothers might make the comparison between the adolescents more symmetrical, but it would do so at the loss of information about the experiences of youngsters from two-parent homes.

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[1] In the research conducted by Taylor and Roberts (1992) using *parental reports* to assess kinship support and authoritative parenting, results similar to those reported here were revealed. Specifically, findings revealed that (a) kinship support was positively associated with adolescent adjustment, (b) authoritative parenting was positively correlated with adolescent adjustment, (c) kinship support and authoritative parenting were positively associated, (d) the association of kinship support with adolescent adjustment was diminished when the effects of authoritative parenting were controlled. These findings suggest that not only are parents' and adolescents' reports of kinship social support similar, but also that findings using either parent or adolescent assessments are quite similar.

Consistent with previous work, adolescents were classified as having authoritative parents if their scores on the Acceptance, Psychological Autonomy, and Firm Control subscales were all above the sample median. These individuals were given a score of 1. Those adolescents scoring below the sample median on any of the parenting measures were classified as having nonauthoritative parents and were given a score of 0.

Psychosocial Adjustment. Our measures of psychosocial adjustment consisted of three outcome variables that Maccoby and Martin (1983) and Steinberg, et al. (1991) have recently shown to be associated with authoritative parenting practices. The first aspect of adjustment, *self-reliance* (10 items, α = .81), was measured using the Psychosocial Maturity Inventory (Greenberger & Bond, 1986; Greenberger, Josselson, Kneer, & Kneer, 1974). The measure assesses adolescents' sense of initiative, control over events, and the lack of dependency. A sample question, reverse scored, includes; "When I do something wrong I depend on my parents to straighten things out for me". The participants indicated their answers using a Likert-scale format ranging from 4 = *strongly agree* to 1 = *strongly disagree*. The second aspect of adjustment considered was *problem behavior* (15 items, α = .82) which we measured by obtaining the adolescents' self-report of their amount of involvement in delinquent activities such as use of drugs, vandalism, and physical assault (Gold & Reimer, 1975). The response scale for the measure is a Likert scale ranging from *several times* to *never*. The third aspect of adjustment examined was the adolescents' *psychological distress*. This index comes from a series of items from the Center for Epidemiological Studies Depression Scale (13 times, α = .88; Radloff, 1977). On this measure, the adolescents reported the frequency of mental or physical states, such as feelings of depression, loss of appetite, and difficulty sleeping over the past month. The Likert-response scale for the measure ranges from *three or more times* to *never*.

Analysis Plan

The data were analyzed according to Baron and Kenney's (1986) recommendations for assessing the presence of mediator effects. According to Baron and Kenney, to establish mediation the independent variable (kinship relations) must affect both the dependent variable (adjustment) and the proposed mediator variable (authoritative parenting), and the proposed mediator variable must affect the dependent variable. Mediation is most clearly apparent when controlling for the effects of the mediator variable (i.e., when both kinship relations and authoritative parenting are in the same regression equation predicting adjustment) substantially reduces the effects of the independent variable.

Our analyses were thus conducted in the following manner. First, the association of kinship social support with adolescent adjustment was examined by regressing the measures of adolescent adjustment on the measure of kinship relations. Second, the measure of authoritative parenting was regressed on the kinship relations measure. Third, the adjustment measures were regressed on the measure of authoritative parenting. Finally, the adjustment measures were regressed on both the kinship relations and parenting measures to examine the effects of kinship relation on adjustment controlling for the effects of authoritative parenting. All of the regression equations were estimated using multivariate multiple regression techniques (BMDP, 1988). In all of the regression equations estimated, we also included the demographic factors of age, sex, and SES to control for their effects.

Results

Tables 2.1 and 2.2 respectively contain the means and standard deviations and the correlations of the major variables.

Kinship Support

Our analysis of the respondents' scores on the kinship measures reveals that on average in both single- and two-parent households, relatives are seen slightly less than once per week. In terms of the number of relatives living within an hour of the adolescents' home, in single-parent households an average of 6-10 relatives live within that range, while for two-parent households the number is 3-5 relatives.

Association of Kinship Support and Adolescent Adjustment

The assessment of the association of kinship social support and adolescent adjustment revealed that in single-parent homes, kinship support is positively associated with adolescent self-reliance, with $\beta = .37$, $p < .01$. Kinship support is also negatively related to problem behavior ($\beta = -.41$, $p < .01$). Kinship support is not related to psychological distress. For adolescents from two-parent homes kinship support is not associated with any of the measures of adjustment.

Association of Kinship Support and Authoritative Parenting

The number of adolescents reporting authoritative or nonauthoritative parenting in each family structure consisted of authoritative, two-parent homes $n = 9$; authoritative, single-parent homes, $n = 40$; nonauthoritative, two-parent homes, $n = 35$; nonauthoritative, single-parent homes, $n = 41$. Because so few of the adolescents from two-parent homes could be classified as having authoritative parents, the only scores of adolescents from single-parent homes were used in assessing the association of kinship support and authoritative parenting. The regression coefficient assessing the association of kinship support and authoritative parenting is significant, with $\beta = .41$, $p < .01$. The small number of two-parent, authoritative families identified among the working-class, African-American sample of this study is in line with recent work using an identical analytical approach. Steinberg et al. (1991) also averaged the scores for mother and father on the scales of the CRPBI before using a median split to define authoritative and nonauthoritative families. In that research, Steinberg et al. (1991) found that 13% (11

Table 2.1
Means and Standard Deviations of Major Variables

	Single-parent households		Two-parent households	
Variable	M	SD	M	SD
Kinship support	32.92	5.14	33.12	5.20
Self-reliance	45.64	6.91	44.63	6.52
Problem behavior	21.89	8.67	21.31	5.32
Psychological distress	28.67	9.36	27.02	11.03
Authoritative parenting	0.70	0.46	0.63	0.49

Table 2.2
Correlations Among Major Variables

	1	2	3	4	5
Single-parent households					
1. Kin social support	--				
2. Self-reliance	.31**	--			
3. Psychological distress	.01	.10	--		
4. Problem behavior	-.38**	.23*	-.19	--	
5. Authoritative parenting	.40**	.44**	.04	-.35**	--
Two-parent households					
1. Kin social support	--				
2. Self-reliance	.00	--			
3. Psychological distress	.03	.51**	--		
4. Problem behavior	.19	.06	.07	--	

Note: Correlations between authoritative parenting and the other major variables were not computed for the two-parent adolescents because only nine of these adolescents reported parenting experiences that would be classified as authoritative.

* $p<.05$

** $p<.001$

out of 82) of their working-class, two-parent, African-American families were authoritative. In comparison, 20% (9 out of 44) of the present sample of two-parent families were authoritative[2].

Authoritative Parenting and Adolescent Adjustment

The association of authoritative parenting and adolescent adjustment was accessed in the estimated regression equation in which adolescent adjustment measures were regressed on the measure of authoritative parenting. Once again, because so few two-parent adolescents reported authoritative parenting experiences, their scores were not included in the analyses. Results reveal that authoritative parenting is positively associated with adolescent's self-reliance, with $\beta = .43$, p .01, and authoritative parenting is also negatively associated with problem behavior ($\beta = -.33$, $p < .01$).

Mediational Effects of Parenting Practices

The data were also analyzed to assess the hypothesis that the effects of kinship support on adolescent adjustment are mediated by the effects of authoritative parenting on adjustment. We examined this hypothesis by assessing the association of kinship support with adolescent adjustment when controlling for the effects of authoritative parenting. The results reveal clear evidence of mediation. With the effects of authoritative parenting removed, the previously significant relations of kinship support with the measures of adjustment are no longer apparent. Specifically, for both self-reliance and problem behavior, significant standardized coefficients linking kinship support with self-reliance and problem behavior ($\beta = .37$ for self-reliance; $\beta = -.42$ for problem behavior) are no longer apparent when the effects of authoritative parenting are controlled ($\beta = .13$ for self-reliance; $\beta = .13$ for problem behavior). In the analysis, only the scores of adolescents from single-parent households were considered. For adolescents in two-parent homes, because there was no association of kinship relations with adjustment, mediational effects of authoritative parenting on adjustment were not possible.

DISCUSSION

Consistent with past research and discussion on the importance of kinship relations in African-American families, our findings reveal a positive association of kinship support with both adolescent adjustment and more adequate parenting experiences. Specifically, adolescents in single-parent homes who perceive social and emotional support by adult relatives for their families, are more likely to report greater self-reliance and lower levels of problem behavior. Single-parent adolescents also report that with more kinship support, parents are more warm and accepting, actively monitor their behavior, and encourage their psychological autonomy.

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[2] It is possible that averaging across the adolescents' scores for each parent masks the authoritativeness that parents individually may display. However, a test of the differences (a test for related measures) between scores for mother and scores for father on the Acceptance, Lax Control, and Psychological Control scales revealed no significant differences in the adolescents' perceptions. For example, for acceptance, the mean score for mother was 22.96, and the mean for father was 22.17. These scores were not significantly different, $t(43) = 0.78$, *ns*. The scores on the other two scales for mother and father were also highly similar, and the test for differences revealed no significant differences. These results are consistent with those of Schwarz et al. (1985), who found that adolescents have a tendency to perceive their parents as exhibiting similar behavior. These findings suggest that averaging scores across parents does not obscure the identification of authoritative parenting within the family. It is still possible, however, that parents may play differing roles within the family regardless of the general family climate. For instance, correlations between adolescents' perceptions of mother's and father's behavior reveal, in particular, that the firmer mothers are in controlling behavior, the more adolescents perceive their fathers as accepting. Further research is needed on the interplay of child-rearing roles displayed by parents and the influence of adolescents' behavior.

Our findings reveal the effects of kinship support on adjustment are mediated by the adolescent's authoritative parenting experiences. When the effects of authoritative parenting are controlled, the significant effects of kinship social support on adolescent self-reliance and problem behavior are no longer apparent. This finding suggests that in single-parent households, when parents have the support of kin, they are more likely to employ authoritative parenting practices, which in turn are positively linked to adolescent adjustment.

Our findings support the prediction that the effects of kinship social support is stronger in single- than two-parent households because, surprisingly for two-parent households, no significant relationships were found with adjustment. It is possible that the combined personal resources of parents in two-parent households are substantial enough that kinship support is not crucial to the functioning and well-being of the family. In contrast, for single-parent households, adult relatives may be encouraged and compelled to play an active role in a variety of family matters. It would be interesting to know whether kinship support in other forms (i.e., financial assistance or child care) has an impact on adolescent adjustment in two-parent households.

Several limitations of the present study should be noted. First, our data were based exclusively on the self-reports of our adolescent respondents. Thus, particularly in the areas of kinship support and parenting practices, data collected from other sources (mother, father, or relatives) or using other methods (naturalistic observations) might yield different information. However, we believe that our data provides useful information for several reasons. First, our results represent the perceptions of a group (African-American adolescents) whose views on the issues heretofore have not been extensively assessed. Second, there is evidence that the reports of knowledgeable informants can provide valid and reliable ratings on behavioral and personality dimensions (Moskowitz & Schwarz, 1982). The questions we ask the adolescents regarding kinship support focused on the behavior of their kin in offering support and the behavior of their family in seeking assistance. This kind of information should be relatively unambiguous and accessible to adolescents. In addition, the high correlation reported above in some recent data analyses (e.g., Taylor & Roberts, 1992) between parents' and adolescents' reports of kinship support further justifies the use of adolescents' self-reports of kinship support. Indeed, significant correlation between adolescent and parental reports of kinship support and the similarity of findings using either sources as informants (Taylor & Roberts, 1992) suggest that adolescent reports are valid indicators of kinship social support.

On a related issue, even though adolescents and parents appear to be similar in their general rating of kinship social support, they may differ in the sources (grandparents vs. aunts or uncles) and types of support (advice vs. entertainment) received from kin. In the measure used here, the specific sources of kin support were not examined. As discussed later, a clear assessment of the sources and nature of kinship social support experienced across family members is needed.

A second limitation of our investigation is the correlational nature of the study. Thus, in single-parent homes it is impossible to know whether kinship relations enhances authoritative parenting practices, or whether parents who are more authoritative are more likely to seek kinship support. To discover the causal directions of the relations found, longitudinal research is needed. A similar kind of argument for reverse causality might be made regarding the relationship found between authoritative parenting and adolescent adjustment. However, it is important to note that in recent longitudinal research involving white working- and middle-class youngsters (Steinberg et al., 1989) using measures similar to those used here, the findings revealed that authoritative parenting in fact promotes competence. The correlations revealed in the present study indicate the need for longitudinal research on the parenting and adjustment of African-American adolescents.

Third, it is important to note that the present investigation focused exclusively on authoritative parenting as a possible mediator of the relations between kinship relations and adolescent adjustment because past research had shown a link between adolescent competence and adjustment and authoritative parenting. However, it is possible that other forms or styles of parenting are better predictors of adolescent adjustment and stronger mediators of the effects of kinship relations. This may be especially true of adolescents from ethnic minority backgrounds for whom we have relatively little information on the nature of their family relations[3].

A final note of caution needs to be made regarding the nature of our sample and the implications of our results. Our data come from working-class African-American youngsters. We do not claim that these findings will hold true for middle-class African-American adolescents, working- or middle-class white adolescents, adolescents from other ethnic or racial groups, or younger children of any background. The assessment of the effects of kinship social support on the parenting experiences and adjustment of other groups and younger children is an interesting area for future research.

Future studies should seek to map out the specific sources of kinship support important for adolescent well-being. We need to understand who (grandparents, aunts, uncles, or cousins) offers support, and we need to obtain a more detailed account of the kind of social and emotional support offered by different kin. For example, support in the form of recreation and entertainment may reside with certain relatives, while assistance in the form of advice, counseling, and problem solving may come from a wholly different set of kin. Also, the kin that adolescents seek for support may be quite different from the relatives the adolescents' parents might seek for aid. A broader picture is also needed of the context of family life in which kinship social support may be present. For example, we need to understand the effects of the climate of family relations (harmonious, conflicted, etc.) on kinship relations. Kinship social and emotional support may have different implications for parenting practices and adolescent adjustment depending on the family environment considered.

Finally, the issue of the impact of authoritative parenting in working-class African-American families deserves further study. It is entirely possible that there are other parenting styles that characterize what these parents do in child-rearing. These parental practices may be more important for the adjustment of the youngsters than the behaviors that define authoritative parenting. It would be instructive to discover how the blend of possible cultural and social-ecological differences facing separate groups map onto an individual's child-rearing strategies and goals.

As the literature on African-American families has developed, an important concern has been to revise biased, inaccurate portrayals of family life and functioning. This work has been critical to our understanding of parenting practices and family relations in African-American homes. It is important to recognize, however, that the necessity of first revising depictions of the family has meant that empirically, we know far too little about the nature and operation of African-American families and children. It is highly important that this gap in the empirical work on family relations and child development be addressed.

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[3] In more detailed analyses of the links between the components of authoritative parenting and adjustment, it appears that some aspects of authoritative parenting (e.g., psychological control/autonomy) are weaker predictors of adjustment than others. A summary of these findings is available from the authors on request.

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Appendix

Kinship Social Support Measure

We would like to ask some questions about your relations with your adult relatives, people like your grandparents, your aunts or uncles, or other adult relatives. Do you agree or disagree with the following statements?

Strongly agree	Agree	Disagree	Strongly disagree
4	3	2	1

1. We often get together with our relatives for reunions or holiday celebrations.
2. When we have to make important family decisions, we ask our relatives for advice.
3. We do not stay in contact with our relatives.
4. Our friends are more dependable in times of need than our relatives.
5. One of the good things in life for me is to talk and have fun with my relatives.
6. We can count on our relatives to help when we have problems.
7. When our family is worried about something, we get advice form our relatives.
8. Family gatherings, like reunions and holiday celebrations, are not much fun.
9. We go out with our relatives for fun.
10. I wish I could see my relatives more often.
11. If I had a problem, I would talk to a friend before I would talk to a relative.
12. If someone in our family was in some kind of trouble, we would call a relative for advice.
13. In my family, relatives often help each other.

Three:

TURNING AROUND FIVE AT-RISK ELEMENTARY SCHOOLS

H. Jerome Freiberg, Neil Prokosch, Edward S. Treister, and Terri Stein

INTRODUCTION

This chapter presents a description of an instructional management system called Consistency Management and its implementation in five urban elementary schools in Texas. The five schools were identified in 1986 by the Texas Education Agency as ranking in the lowest 5% of all elementary schools taking the state-mandated Texas Education Assessment of Minimal Skills (TEAMS).

An analysis of the program indicates that the five schools significantly improved their TEAMS test scores from 1985-86 to the 1987-1988 school year in mathematics, reading, and writing. When compared to a matched set of elementary schools, the Consistency Management schools increased 17% in the percent passing the TEAMS while the nonprogram schools decreased 2% in the percent passing during the 1987-1988 school year. When the students of teachers trained in the program were compared with students of untrained teachers, based on the Metropolitan Achievement Tests (MAT6) and the TEAMS, the program (experimental) group scored significantly higher beyond the $p < .01$ level in total language, total reading, social studies, science, and total mathematics, and in mathematics and writing on the TEAMS. Additionally, discipline referrals were reduced and a series of structured interviews of the 5 principals and 19 teachers indicated that the program had direct transfer to the classroom (Freiberg, Prokosch, Treister, Stein, & Opuni, 1989a).

This study seems to support the pioneering works of Brookover, Beady, Flood, Schweitzer, and Weisenbaker (1979); Brookover and Lezotte (1977); Edmonds (1979a, 1979b, 1979c); Goodlad (1983a, 1983b); Rutter, Maughan, Mortimore, Ouston, and Smith (1979); Mumane (1975); Summers and Wolfe (1975); Stallings and Mohlman (1981); Levine and Stark (1982); Edmonds and Frederiksen (1978); and Wynne (1980) who establish that schools can make a difference in academic achievement regardless of socioeconomic status. This is given substantial support from several syntheses and reviews of school-level impact on students' academic achievement (Benbow, 1980; Bridge, Judd, & Moock, 1979; Centra & Potter, 1980; Edmonds, 1979c; Glassman & Biniaminov, 1981; Good & Brophy, 1986; MacKenzie, 1983). This study disaggregated the school achievement data to determine the influence of training on teachers who were inserviced in the program against those teachers from matched schools who were not trained in this specific program but received other similar services from the district. Qualitative data derived from structured interviews of principals and teachers from the five schools provided a broader understanding of the results and issues faced by principals, teachers, and their students.

School Demographics

The five elementary schools which were program schools are being called Washington, Adams, Jefferson, Madison, and Monroe for the purpose of anonymity. The schools had three primary commonalities: a) the students were from minority groups (94%), b) the students were from low socioeconomic backgrounds (83% were on free or reduced lunch), and c) student mobility was twice the average of the highest-performing elementary schools in the district. The student populations of three schools were exclusively African American, one was Latino and African American, and one was Latino, African American, and Asian. Geographically the schools were diverse with only Jefferson and Madison located in the same district area of the city. The percentage of new teachers varied from school to school. For example, Adams Elementary School had 60% of the teachers in their first, second, or third year of teaching while Monroe Elementary School had 58% of the teachers with 11 or more years teaching experience. The district average is 47% with 11 or more years teaching experience (see Table 3.1 for demographic comparisons between program and nonprogram schools).

Table 3.1
Demographic Comparison of Program and Nonprogram Schools
(Based on 1985-86 Data)

	Total Enroll-ment	Ethn.* Percent			Free/ reduced lunch Percent	Mobil-ity Percent	Atten-dance Percent	Ach.** Percent		Admin. Area
		A	L	O				>	<	
Washington	517	96	3	1	98	32	95	57	7	10
Able***	826	75	23	1	98	62	94	61	9	10
Adams	276	36	57	7	88	75	96	28	21	12
Baker***	265	37	63	0	97	44	98	74	2	12
Jefferson	499	100	0	0	74	30	97	51	15	4
Charles***	630	100	0	0	84	41	95	51	11	4
Madison	516	99	0	1	70	55	95	55	10	4
Dillon***	1,288	99	1	0	97	53	95	48	14	4
Monroe	774	43	30	27	85	49	96	59	8	14
Edward***	408	25	39	36	57	45	96	60	14	14

* A = African American; L = Latino; O = Other (American Indian, Asian, and Caucasian)
** > = above, < = below grade level on the ITBS Composite
*** nonprogram schools

Consistency Management

The Consistency Management program (Freiberg, 1983) was used as the intervention in each of the five schools. Consistency Management was the name given to the program which translated research in classroom management, instructional effectiveness, school climate, school effectiveness, and staff development into practical classroom and school applications (see Cohen, 1983; Doyle, 1986; Emmer & Evertson, 1981; Freiberg, in press; Freiberg, Buckley, & Townsend, 1983; Freiberg, Driscoll & Knight, 1987; Good & Brophy, 1986; Kounin, 1970; Lightfoot, 1983; Murnane, 1975; Stallings & Mohlman, 1981; Teddlie, Stringfield, & Desselle, 1985).

Project Goals

The goal of Consistency Management is to establish a supportive, safe, and orderly classroom and school environment, which is contingent upon teacher consistency. Consistency begins with a cooperatively developed educational mission that is grounded in shared values by members of the learning community. The goal is to create a schoolwide consensus for teaching and learning which is consistently implemented. Consistency Management is designed to prevent problems which might interfere with learning, eliminating or reducing the need for more costly and time-consuming interventions. Consistency Management provides a self-analytical approach for teachers to examine how they establish a positive, orderly learning environment. This was achieved through a combination of strategically timed staff development workshops, teacher and principal self-assessments, team building (students, teachers, principals, and parents) and parental and community involvement.

Instruments were provided throughout the workshop sessions for the school faculty to monitor their own consistency, individually, as a faculty, and with their principal. A Consistency Management Calendar was provided for teachers to identify areas in which they were inconsistent. A 30-item Consistency Checklist was used to review key areas identified in the workshops. Teachers audiotaped 30-50 segments of their classrooms and used a *Low Inference Self-Assessment Measure* (Freiberg, 1987) to code, analyze, and critique their teaching and meet with other teachers to share ideas for instructional improvement.

Each of the five schools reduced the time spent on disciplining students. Adams Elementary School, with 276 students, had the lowest enrollment of the five schools and had the most problems in discipline. In 1986, 109 of the 276 students were sent to the office for disciplinary action, 34 students had warning notices sent home, and 24 students were suspended. In the 1987-1988 school year 19 students were sent to the office for disciplinary reasons. Nine of the 19 referrals were from substitute teachers (Freiberg, Prokosch, Treister, Stein & Opumi, 1989b). One warning letter was sent home for an after-school (on the way home) off-campus fight that was reported to the principal and no students were suspended. It is important to note that the second half of the school year had the highest proportion of misbehaviors in both years.

Inservice Schedule

The training began in April of 1987 with a voluntary all-day Saturday workshop. Approximately 80% of the teachers and all the principals from the five elementary schools attended. A one-hour follow-up session was provided in May at each school site. The teachers proposed another workshop before school began. Two workshops were provided in August of 1987. The first August session was directed to all new teachers hired over the summer and any teachers who were unable to attend the April session. The second August workshop was for all the teachers and principals and the goal was to plan for the opening of school and establish a consistency plan for the year. Over 90% of the teachers attended either the April or August workshops. Participation was voluntary for all sessions. The teachers received state-approved Advance Academic Training Credit (AAT) which could be used by the teachers for advancement on the Texas Career Ladder.

Six two-hour follow-up workshops were provided at the five schools for a total of 30 workshops. Workshops began in September and continued each month until February of 1988. The staff development design was based on previous research on the factors which caused staff development to transfer to the classroom in the same district (see Freiberg, Townsend, & Buckley, 1982).

Management Values

The teachers were asked to examine their own management values both individually and collectively. They were asked to determine how they communicate their values to the students and to determine where teacher-student values are either congruent or in conflict. The Consistency Management program emphasized resolution of problem areas. For example, inappropriate student language was a common value conflict area. Some students would use four- letter words as if they were conjunctions for each sentence. Teachers were asked to explain that language which may be used with friends or at home may not be appropriate in school or at work. Students were given a new context for language usage. Rather than trying to negate a home value upon which the teacher or school had little control, student language was placed in a differentiated context.

Workshop Contents

Workshop #1. The first workshop, held during the first week of school, placed strong emphasis on contacting parents at the beginning of the year when problems were at a minimum. Positive Post Cards were sent home supporting timely return of homework or being punctual to school. Teachers called home (when parents had telephones) to provide a portrait of the school day and strategies for parental assistance at home for their children. A telephone script was provided during the workshop for teachers who were uncertain about parental contacts. Strategies were provided for teachers to help students feel part of a learning community. Teachers went around the school taking pictures of students involved in academic tasks. Pictures of students reading, working in groups, studying, and presenting information were posted on a bulletin board in the main hallway of the school.

Workshop #2. The second workshop emphasized the need for developing a range of questions to challenge student thinking. The teachers were provided a range of questioning strategies with an emphasis on higher level questioning techniques. The teachers were shown video examples of other teachers using individual student chalkboards to help in assessing student learning. The video teacher would ask students, for example, a math problem and the class would write their answers on their own chalkboards. On cue from the teacher all the students would hold up their answers. Only the teacher would see their responses. The teacher would make a mental note of which students missed the problem and work with them during seat work time. If enough students missed the problem the teacher stopped and retaught the concept.

Workshop #3. The third workshop asked teachers to be reflective about their instruction. Each teacher audiotaped a 30-minute segment of their classroom and used a Low-Inference Self-Assessment Measure (see Freiberg, 1987 for a detailed description of the instrument) to analyze their interaction with their students. The teachers listened to their tape and then prepared a written critique which they discussed among their peers. The principals who attended most of the sessions did not stay for the teacher self-assessment sessions.

Workshop #4. The research on cooperative grouping (Slavin, 1983) and peer tutoring (Berliner & Casanova, 1988) support these strategies as powerful learning tools, particularly for low-achieving students. The fourth workshop provided examples of how to develop and manage these learning strategies. Many of the teachers had prior training in both strategies but had difficulty in managing the student-focused activities. The sessions included ways of gradually developing cooperative learning groups, starting with groups of two and building slowly to groups of four over a three-month period.

Workshop #5. The fifth workshop was conducted by an expert teacher from the district who was trained in Consistency Management and had extensive experience in learning centers. She brought her own classroom centers to the workshop and allowed the teachers to participate in her centers and assisted them in building their own math or reading center. Centers and their management were presented as a means of moving away from teacher and student dependency on worksheets. Using centers as part of reading time allowed students to circulate from reading with the teacher to seatwork to center work. This flow of instructional activities reduced the amount of time a child would spend on any one task to about 20 minutes, reducing boredom and ultimately off-task student behavior.

Workshop #6. The final workshop was held in February of 1988. The session included teachers reporting on the on-task/off-task seating charts and interactive instruction observations conducted by teachers' peers during the previous week (see Stallings, Needles, & Sparks, 1987 for examples of the instruments). The teachers had a great discussion about the types of interactions they had with their students and how best to create a relaxed but productive classroom. As mentioned, the Consistency Management training was provided at the end of the previous year. This enabled the teachers to test some of the ideas with their current students. Although student and teacher interaction patterns were set by the end of the school year, teachers indicated seeing enough of a change in their students in the spring of 1987 to begin planning during the summer for the next school year in September. The before-school workshop in August reviewed and reinforced the previous sessions and focused their attention on the importance of consistency in the classroom and throughout the school.

Inservice Framework

Too often, inservice sessions provided a few days prior to the opening of school present sessions on new curriculum, reading texts, different instructional approaches, or organizational procedures that require significant changes in teacher planning and implementation. Few teachers are effectively able to assimilate and implement these new requirements as their attention is being drawn to the opening of school and the influx of new students. The inservice strategy for this program was designed to provide ample time for assimilation (from April to August 1987), opportunities for collegial and administrative interaction (April, May, and August sessions), and follow-through with additional sessions for the first six months of school (September 1987 to February 1988).

Achievement Analysis

Method

There were three levels of analyses conducted to investigate the effects of Consistency Management on student achievement. Level I involved determining whether individual school level achievement improved from 1986 to 1988 (pre-post intervention). Level II investigated whether aggregated student achievement improvement across the five program schools was different from aggregated student achievement improvement across five comparison schools who received no training in the Consistency Management program. Level III identified the teachers in the program schools who had been trained in Consistency Management and compared the achievement of these teachers' students to the achievement of a random sample of students in the comparison schools.

Instruments

Student test data were obtained on two achievement instruments: the Metropolitan Achievement Tests (MAT6), a nationally standardized, norm-referenced academic achievement battery; and the Texas Educational Assessment of Minimal Skills (TEAMS), a state-developed and mandated, criterion-referenced basic skills battery.

The MAT6 are overall measures of achievement in the five basic content areas of language arts, reading, social studies, science, and mathematics. As nationally normed tests, their content should be representative of the curricula being taught in these content areas in schools across the nation and test performance of students in a school or program can be compared to the performance of typical students of the same age and grade across the nation. The reported KR-20 reliability coefficients for the various batteries of the MAT6 are generally high, ranging from .63 to .98.

The TEAMS tests measure the minimum competencies in mathematics, reading, and writing that are expected to be mastered by all students in specific grades. These minimum competencies were defined by the Texas State Board of Education and were enacted into state law in 1984 under House Bill 72. The domain of knowledge and skills on which TEAMS test items were developed is much narrower and more focused on lower-level thinking processes than the domain on which MAT6 test items were developed. Reliability data have not been reported for the TEAMS.

The MAT6 are administered annually at all grade levels during the spring semester (first administered in 1987) to students in grades 1 through 9. Test scores for the study were obtained on the five content area batteries (Total Language, Total Reading, Social Studies, Science, and Total Mathematics) for the 1987 and the 1988 administrations for students who were in grades 2 through five in 5 in the program (trained in Consistency Management) and nonprogram groups.

The TEAMS is also administered annually during the spring semester (first administered in 1986) but it is administered only in first, third, and fifth grades. Test scores on the three content area subtests (Writing, Reading, and Mathematics) from 1986 and 1988 were obtained for program and nonprogram students who were in grades three and five in 1988.

Level I Analysis

The official district evaluation of the staff development programs, including the Consistency Management program, which were provided to the five "low-performing" schools to help the teachers in these schools improve student achievement, included an analysis of the simple raw change in scale scores on the TEAMS for students with 1986 and 1988 test data. Correlated sample t-tests were used to determine whether there was statistically significant improvement in the mean scale score from 1986 to 1988 at each of the tested grades, on each of the subtests, at each program school.

While all five schools showed statistically significant improvement in test performance on the TEAMS in one or all subtests in one or both grades, this level of analysis should be viewed as a very cursory preliminary investigation. The multiplicity of the t-test comparisons without adjusting the overall alpha level simply increases the chances of making a Type I error. More importantly, no comparison was attempted between the program schools' student performance and a comparable set of nonprogram schools' student performance.

Level II Analysis

In this second level, five schools were selected to serve as a comparison group of schools to the program schools. The comparison schools were matched, as closely as possible, to the five program schools on the following variables (based on 1985-86 data, in which the five program schools were identified as "low-achieving" schools): total student enrollment, district administrative area, student ethnic composition, student mobility and attendance rates, student free/reduced lunch rates, and student achievement (i.e., percent of students above and below grade level as determined by performance on the Iowa Tests of Basic Skills, administered during the spring of 1986). Table 3.1 provides the data regarding these variables for the five paired sets of schools and Tables 3.2 and 3.3 present the scale scores. The investigation in this level still focused on basically school-level data. In this case a comparison was made between the set of program schools and the set of nonprogram schools on the difference from 1986 to 1988 in the total percentage of students who passed one or more of the TEAMS subtests. The overall percentage of students who passed the TEAMS increased from 61% to 78% in the program schools, while the percentage of students who passed in the nonprogram schools decreased from 63% to 61% (See Table 3.4 for the individual school percentages). The McNemar test was used to test whether the passing proportions were identical from pre- to posttest within each group. The program group's increase of 17% more students passing was statistically significant $(Z = 14.1, p < .001)$, while the decrease of 2% fewer students passing in the nonprogram schools was also significant $(Z = 5.7, p < .001)$. These results indicated that something was working in the program schools--student achievement on the TEAMS was improving. Thus far, though, we had been looking at only raw change, only at one measure of achievement (a measure that was not necessarily representative of overall student achievement), and only at a global school performance base.

The inclusion of a third level of analysis reflects a growing concern about the lack of stability of achievement as reported by standardized test scores for improving schools. The aggregation of data may mask groups of students who continue to perform poorly but whose scores are lost in schoolwide reporting of achievement (Freiberg, in press).

The research directors of member school districts in the Council of Great City Schools at their annual meetings have expressed continuing concerns about the inconsistencies observed in schools that have made gains in test scores only to regress after a relatively short period of time (Frechtling, 1987). The Level I and II types of analyses described in this chapter are acceptable procedures followed by many large school districts with permanent research and evaluation departments. Given the multitude of programs in large urban school districts and the general lack of resources for evaluation, let alone research, completion of Level I and II analyses would be considered more than necessary. Based on the lack of stability of test scores reported nationally for improving schools in other districts' school improvement efforts, an additional level of analysis was conducted to examine program effectiveness.

A third level of analysis was conducted to control for pretest effects on posttest performance, to include a broader based academic achievement measure, and to compare the performance of students who had been instructed during the 1987-88 school year by teachers actually trained in Consistency Management to the performance of students who had been instructed by teachers not trained in Consistency Management in the nonprogram schools.

Table 3.2
Teams Mean Scale Score. Matched Students

		Math		Reading		Writing	
Program Schools		1-3	3-5	1-3	3-5	1-3	3-5
Washington	88	817.96 N	736.36	750.20 N	746.91 N	742.62	775.84 N
	86	787.45 (59)	726.89 (46)	706.62 (59)	770.47 (46)	734.00 (59)	656.63 (46)
Adams	88	726.36	730.90	675.45	766.55	721.81	753.90
	86	769.72 (11)	743.90 (20)	668.00 (11)	731.55 (20)	681.00 (11)	680.70 (20)
Jefferson	88	855.17	802.17	801.31	743.61	776.33	739.46
	86	801.02 (45)	699.69 (39)	773.06 (15)	695.35 (39)	754.44 (45)	700.02 (39)
Madison	88	808.29	737.15	755.15	724.77	747.63	737.55
	86	833.97 (44)	680.53 (45)	760.11 (44)	674.88 (45)	786.04 (44)	625.93 (45)
Monroe	88	802.86	799.87	750.17	783.53	698.10	767.34
	86	779.41 (29)	732.42(47)	865.51 (29)	730.74 (47)	762.75 (29)	654.14 (47)
Nonprogram Schools							
Able	88	707.01	754.80	680.37	741.70	645.52	709.11
	86	779.27 (59)	695.21 (51)	769.74 (59)	712.84 (51)	774.25 (59)	691.27 (51)
Baker	88	791.82	787.05	769.34	771.65	751.08	711.40
	86	849.21 (23)	796.40 (20)	722.65 (23)	757.35 (20)	734.95 (23)	690.80 (20)
Charles	88	762.25	730.61	708.62	728.50	710.32	683.90
	86	791.86 (58)	679.36 (52)	752.96 (58)	683.57 (52)	788.79 (52)	653.88 (52)
Dillon	88	728.57	696.64	704.88	728.84	686.40	670.79
	86	808.23 (122)	661.71 (111)	731.72 (122)	690.18 (111)	726.40 (122)	668.31 (111)
Edward	88	796.82	813.26	782.85	815.36	735.60	814.56
	86	794.42 (35)	778.43 (30)	768.25 (35)	742.03 (30)	735.60 (35)	713.83 (30)

Table 3.3
Difference in Teams Mean Scale Score. 1988-1986 Matched Students

	Math		Reading		Writing	
Program Schools	3-1	5-3	3-1	5-3	3-1	5-3
Washington	30.51	9.47	43.58	-23.56	8.62	119.21
Adams	-44.36	-13.00	7.45	35.00	40.81	73.20
Jefferson	54.15	102.48	28.25	48.26	21.89	39.44
Madison	-25.68	56.52	-4.96	48.89	-38.41	111.62
Monroe	22.65	67.45	64.66	52.79	-28.65	113.20
Nonprogram Schools						
Able	-72.26	59.59	-89.37	28.86	-128.73	17.84
Baker	-57.39	-9.35	46.69	14.30	16.13	20.60
Charles	-29.61	51.25	-44.34	44.93	-78.47	30.02
Dillon	-79.66	34.93	-26.84	38.66	-40.00	2.48
Edward	2.40	34.83	14.60	73.33	-90.00	100.73

Table 3.4
Teams Aggregate Percentage Passing. Matched Students Pij* nij*

	Program Schools			Nonprogram Schools	
	1985-86	1987-88		1985-86	1987-88
Washington	58.3%	80.2%	Able	64.8%	55.2%
Adams	58.1%	73.1%	Baker	73.8%	80.5%
Jefferson	68.3%	82.6%	Charles	61.8%	61.4%
Madison	56.6%	70.8%	Dillon	57.6%	54.5%
Monroe	60.9%	78.0%	Edward	71.3%	79.9%
Total	60.06%	78.0%	Total	62.7%	60.9%

* = Where Pij = number of passers for subtest (i) grade (j), nij = number of took subtest (i) grade (j)

Level III Analysis

Subjects. Teachers from the five program schools who had attended at least seven hours of Consistency Management training during the spring and/or summer of 1987 were identified (*n* = 137). Teachers who met the following criteria were then selected from this group. The teachers had to

- be a regular classroom teacher (grade 2, 3, 4, or 5),
- have a readily available computer file identification number, and
- have completed the 1987-88 school year in the same program school that he/she began the school year.

Twenty-eight teachers met these criteria. Students of these teachers were then identified on the master computer data file.

Students were randomly selected from the five nonprogram schools according to the grade distribution of the students identified in the program schools. The total number of students (*n* = 335) sampled from the comparison schools did not exactly equal the total number of students (*n* = 364) included in the study from the program schools because of insufficient numbers of students with complete test data. Students in the two groups were fairly similar as to ethnic breakdown and percent on free/reduced lunch (see Table 3.5). These were the only two demographic variables that could be checked readily from the computer file at the individual student level. It should be noted that the comparison schools in which the students were randomly selected were matched for five additional comparable variables.

Procedure

A one-factor (two-level) multivariate analysis of covariance (MANCOVA) was performed on the five batteries of the MAT6 to determine whether achievement differed between program students (students

Table 3.5
Student Sample

	African American	Latino	Other	Free/Reduced Lunch
		Percent		Percent
Program students	90	80	2	72
Nonprogram students	85	9	6	79

who were instructed by teachers with Consistency Management training) and nonprogram students (students who were instructed by teachers without Consistency Management training). The mean NCE (Normal Curve Equivalent) scores on each of the five MAT6 batteries from the Spring 1988 administration, which represented posttest performance, were the set of dependent measures which were adjusted by the set of mean NCE scores from the 1987 administration, which represented the pretest performance. The adjusted posttest mean differences between the groups were analyzed. The MANCOVA model makes it possible to examine academic achievement holistically, taking into account the correlation in performance across the different content areas. This model also allows for the statistical adjustment of posttest performance by pretest performance.

The following assumptions of the analytical model were tested and met:

(a) Linear relationship among the dependent variables (Bartlett Test of Sphericity = 846.94124, $df = 10$, $p < .001$)

(b) Linear relationship between the set of dependent variables and the set of covariates (Wilks lambda = .19347, $F = 56.88452$, $df = 25, 2557.31$, $p < .001$)

(c) Homogeneity of the regression hyperplanes for the covariates for each group; i.e., there was no pretest by group interaction effect (Wilks lambda = .95898, $F = 1.15152$, $df = 25,2538.73$, $p = .274$)

The assumption of homogeneous variance-covariance matrices between groups was not supported. Greater variability was associated with the nonprogram group of students. As this group was the smaller of the two groups, the statistical test then becomes a more liberal test (Stevens, 1986). This liberality can be counterbalanced by testing statistical difference at a stricter alpha level (Stevens, 1986). Alpha for this study was set at .01 instead of the more traditional .05 level.

A second one-factor (two-level) multivariate analysis of covariance was performed on the three subtests of the TEAMS test. Mean z-scores (student scale scores on each of the subtests were converted to z-scores within grade level) from the spring 1988 administration (posttest variables) were adjusted by the set of mean z-scores from the spring 1986 administration (pretest covariates). The adjusted posttest means were then analyzed.

All assumptions that were tested were substantiated.

(a) Linear relationship among the dependent variables (Bartlett Test of Sphericity = 167.20875, $df = 3$, $p < .001$)

(b) Linear relationship between the set of dependent variables and the set of covariates (Wilks lambda = .58627, $F = 17.771749$, $df = 9, 649.96$, $p < .001$)

(c) Homogeneity of the regression hyperplanes for the covariates for each group; i.e., there was no pretest by group interaction effect (Wilks lambda = .97557, $F = .72936$, $df = 9, 642.66$, $p = .682$)

(d) Homogeneity of the dispersion matrices (Boxes $M = 14.49899$, $F = .67424$, $df = 21, 271990$, $p = .863$)

Results

The results of the multivariate analyses on the MAT6 and TEAMS achievement instruments indicated that statistically significant differences in adjusted posttest means existed between program students and nonprogram students. In each analysis, the set of adjusted posttest means for students of program teachers was higher than the set of means for students of nonprogram teachers. (MAT-6: Wilks lambda = .92776, $F = 10.71428$, $df = 5, 688$, $p < .001$; TEAMS: Wilks lambda = .82880, $F = 18.38451$, $df = 3, 267$, $p < .001$).

The univariate F tests on the individual batteries of the MAT6, indicated that achievement was greater for the program group of students on Total Language ($p < .001$), Total Reading ($p = .009$), Social Studies ($p < .001$), Science ($p = .007$) and Total Mathematics ($p < .001$) (see Table 3.6). The subsequent univariate F tests on the individual subtests of the TEAMS indicated that achievement was greater for the program group of students on the Writing subtest ($p < .001$) and on the Mathematics subtest ($p < .001$). No statistical difference existed between the two groups on the Reading subtest ($p = .211$) (see Table 3.7).

The TEAMS tests were used as the basis by the state for identifying the five schools in 1986 as the lowest performing elementary schools in the district and are used by the local media for in-district as well as between-district comparisons for student achievement. Given the lack of available reliability and validity data on the TEAMS, the MAT-6 data in comparison represents truer measures of academic performance; therefore, one may have greater confidence in the analysis of these data.

Limitations

There were a variety of programs directed toward students and teachers in the five schools. Sorting through each program and trying to determine its particular effect on student achievement is a difficult task given the interrelationship among activities within a school. One of the principals clarified this issue when she stated "the Consistency Management program was the glue which held the other programs together." The other principals concurred with this assessment.

The results of these analyses provide preliminary support to the premise that teachers who are trained in Consistency Management and utilize the principles in the classroom can facilitate improvement in student academic achievement.

There are, of course, limitations to this study, as there are with any study in a natural school environment. It is always difficult to assess program effect in schools because of the multiplicity of contributing factors to student achievement that abound. The final level of the study, however, did compare the test performance of only those students whose teachers had been trained in the program to the test performance of students whose teachers had not been trained and who were in comparable school environments. Student predisposition to testing was controlled to an extent, by removing from the posttest the effects of the pretest and by comparing these adjusted posttest scores as a set of related indices of achievement.

We were able to control and examine neither the differential degree of training the program teachers had, nor the degree of transfer of the program principles to the classroom setting by the individual teachers included in the study. We know, however, from the teacher and principal interview data and from the follow-up training sessions, that most teachers trained at each of the five schools utilized what they had learned in their Consistency Management sessions. In addition, because all teacher ID numbers were not available, grade by school cell sizes did not allow for comparing student performance at these levels.

Teacher Interviews

Introduction

Beginning in October of 1987, a series of structured interviews was conducted with all of the principals and a volunteer sample of 35 teachers from the 5 schools. Of the volunteering teachers, four were selected from each of the schools to reflect different grade levels and subject areas. Nineteen teachers participated in a first round of interviews in the fall of 1987; a second round of interviews was held in the spring of 1988 with the five principals and the sample of teachers (less one who was no longer available). The interviews took approximately 60 minutes each and were conducted by two doctoral students (who are authors on this chapter). As a result, forty-seven interviews were conducted with principals and teachers of the five schools during the 1987-88 year. The first part of this section of teacher interviews focuses on teacher responses; the second part presents principal responses. The interviews explore many relevant factors but here we restrict ourselves to material on the role of inservice and consistency management in improving teaching effectiveness and student learning.

Inservice Programs

To encourage the teachers' professional development, a large number of organizations, inside and outside of the district, present a wide range of inservice programs each year. When asked about the nature and value of these programs, teachers could identify titles, sponsorship, and formats, but could tell little of their content and less of their value. Teachers indicated that valuable inservice programs have recognizable characteristics. These included being taught something new or reinforcing ideas they had learned before; an interesting speaker or presenter modeled effective instruction by using a variety of teaching techniques; and inservice content was relevant to their classroom situation, was easily implemented, and gave teachers observable signs of success. The immediate demands of the teaching conditions allowed little room for higher level professional development.

Table 3.6
Pre-, Post-, and Adjusted Posttest Mean NCEs on MAT6, Grades 2, 3, 4, and 5

	Observed Pretest Means	Observed Posttest Means	Adjusted Posttest Means
Total language			
Program	48.3	53.1	52.4
Nonprogram	46.7	46.3	47.1
Total reading			
Program	42.2	43.6	42.8
Nonprogram	40.7	40.0	40.8
Social Studies			
Program	40.6	47.2	46.6
Nonprogram	39.1	41.6	42.3
Science			
Program	40.7	47.3	46.5
Nonprogram	38.3	42.9	43.7
Total Mathematics			
Program	51.2	55.1	54.0
Nonprogram	48.2	46.7	47.8

Table 3.7
Pre-, Post-, and Adjusted Posttest Mean Z-Scores on Teams, Grades 3 and 5

	Observed Pretest Means	Observed Posttest Means	Adjusted Posttest Means
Writing			
Program	-.06140 (735.1)	.30238 (781.2)	.32088 (783.3)
Nonprogram	.06230 (741.6)	-.30684 (726.3)	-.32560 (724.2)
Reading			
Program	-.06093 (712.5)	.04032 (734.5)	.07182 (737.2)
Nonprogram	.06183 (728.0)	-.04091 (726.8)	-.07187 (724.1)
Mathematics			
Program	.03252 (705.9)	.23218 (761.9)	.25464 (763.8)
Nonprogram	.03300 (717.2)	-.23559 (689.9)	-.25838 (688.0)

Mean scale scores are provided in 0 for information only; Program *n* = 176; Nonprogram *n* = 166

Consistency Management

Teachers responded positively to Consistency Management, both as an inservice program and as an approach to classroom management. Teacher participation in the inservice sessions was voluntary; nonetheless, the principals' encouragement and the fostered collegiality through the sharing of food at each session maintained a high attendance rate in all five schools throughout the year. Teachers did express their reluctance to the interviewers at attending the initial presentation in the spring of 1987, some asserting that they had no management problems or resenting that the session was scheduled for all day Saturday. In the fall, when sessions were scheduled for the late afternoon, some teachers resented the sessions taking place at the end of a long school day.

The negative comments concerning logistics were overshadowed by the generally positive responses to the content of the sessions. Almost all of the teachers acknowledged that they had enjoyed the sessions and had learned something that was helpful to their work in the classroom. They praised the Consistency Management inservice program for its meeting many of their criteria for a good inservice program: good presenter, relevant material, and variety in presentation strategies and transferable for their classrooms. It also responded to some of their concerns of professional and collegial isolation. They particularly appreciated the discussion and interaction among the participants and the material pertinent to their work with urban at-risk students. One teacher commented that this program was better preparation for their working with inner-city at-risk students than anything they had in college. Another said it was "more like a college course" because the sessions were ongoing, with time between sessions to assimilate the material, experiment with implementation and receive feedback at subsequent meetings. "It didn't leave us hanging," said another, appreciating the continuing support from colleagues and presenter at each session.

Teachers reported that Consistency Management was also effective as a classroom management program. All of them reported that they were in fact using in their classrooms what they had learned in the inservice sessions. Their most implemented aspect of the program dealt with classroom management techniques. Many said that they adapted the system to suit their particular needs, with regular classroom teachers using group rewards while special education teachers preferred individual rewards. They asserted that they liked the Consistency Management program because it was easy to implement and had objective criteria for teacher decision-making. "It reminds me to be fair, that I'm not judge and jury," said one. They appreciated that it offered them and their students clear signs of success, motivating them and emphasizing positive behavior. They also welcomed the fact that Consistency Management involved the entire school staff, including nonteaching personnel, to maintain the behavioral expectations in and out of the classroom and the school. It called for creating an environment that was constantly encouraging. Negative comments focused on one aspect of the program. Some teachers had philosophical opposition to the use of extrinsic rewards. Nonetheless, even those teachers had adopted the program in their classrooms and reported success.

In the second set of interviews, conducted in the second half of the school year, teachers said that they were continuing to use the program. More of them had made alterations in their procedures, eliminating aspects that did not work for them or modifying others to be more effective. They reported changing the frequency of the rewards, directing them more often to individuals than to the group, and moving from extrinsic to intrinsic incentives.

Principal Interviews

Consistency Management

Order and discipline in the schools was a primary concern for the principals. High student mobility (34%) and a high teacher turnover rate (10%-25%) contributed to a lack of order. The principal at Adams Elementary indicated that the program dramatically reduced referrals to the office because it enabled teachers to handle their own discipline problems. She credited the Consistency Management program for this change by noting that without it "I would not have survived." This was a common theme for the schools. The principal at Monroe Elementary stated in May of 1988: "I still haven't seen many kids. I bet I haven't seen 14 lads this year; last year I saw 62." Other schools also indicated a reduction in disciplinary referrals. The principal at Thomas Jefferson stated, "Last year we needed more help with discipline. Now we are doing very well and can move beyond that."

The principals said the teachers viewed the program as positive. A common theme expressed by the principals was the need for the teachers to acquire tools for dealing with various student behaviors. One principal stated that the program provided a clear plan throughout the school for discipline, making the teachers responsible for their students' behavior and removing her from her role of disciplinarian. "I am not a policeman!" she asserted. The need for a support program when the program ended was another need stated by the principals. Following the last session (February 1988) the principals talked about another session for the spring. One principal commented, "More of a support system was needed in place after the end of the workshops, perhaps to focus in on what's happening at the end of the year."

Parental Involvement

Each of the principals discussed their concerns and efforts related to parental involvement.

The programs to involve parents included the following:

- Technology week. The parents learned with their children about computers during Saturday sessions.
- Report card night. One school had parents pick up the child's report card and meet with the teachers. Sixty percent of the parents attended.
- Newsletters. Stories by the students and articles from the teachers were included in this form of communication brought home by the students.
- Language classes for non-English-speaking parents. Spanish-speaking parents in two schools had classes to improve their communication.
- Shell II. The Shell Oil company sponsored Saturday programs focusing on math and science for both parents and their children.
- Incentive programs. These included (a) postcards that teachers sent home to communicate positive academic achievements or behavior of students, and (b) certificates to parents related to student achievement.

- Festival Activities. Each of the schools had events where food was served and the community was invited.

- PIO. Each school worked to improve formal parent organizations.

One lesson learned from parental and community involvement is that one approach will not involve all the parents. A variety of programs and strategies are needed to increase total parental involvement. The end result is an important message for students, which lets them know school is important.

Implications

There are numerous implications from the perspective of the principals in this study. The concept of school-based management was an unspoken theme which emerged from the principal interviews. The five principals in defining their good and bad days emphasized the need to be out of the office and in the classrooms. Providing resources to the schools and developing strategies with their teachers to improve achievement were their primary objectives.

Parental involvement in communities where students may be living with grandparents, other relatives, or in dysfunctional families presents serious problems in the partnership each of the principals identified as necessary for educational improvement. The strategies used by the principals and teachers represented a layered approach to parental involvement. One strategy may increase parental involvement by 5% but the implementation of several strategies could boost that involvement to 40 or 50 %. The use of classroom strategies (e.g., positive postcards home and telephone calls for positive home contacts at the beginning of the year) combined with schoolwide strategies (e.g., report card night and technology week) increased the opportunities for parents to become aware and supportive of their children's education.

Rather than looking for one strategy to solve all the problems in schooling, it is evident from the interviews that the principals are looking for a multidimensional approach to effective schooling.

Conclusions: The Half-Life Of Improving Schools

The resources provided by the district of these five at-risk schools have enabled them to turn the corner and create a positive learning environment for the students and an orderly and supportive working environment for the teachers and administrators.

In response to the first workshop, over 20 written comments on the district's evaluation related to teacher requests for continuance of the program during the summer. As one teacher stated in the comments section, "Please don't leave us hanging." Veteran teachers have seen innovations come and go and they realized (as evident in their comments) the importance of long-term staff development which meets their needs. The school district in this study under the leadership of a new superintendent, has made a clear commitment to making the schools abridge to personal and academic success for all students.

It is not just the students who are at risk of failing, but the schools which provide a safety net between what may be a bleak and difficult existence and a hopeful and productive future. The half-life factors of improving schools represent a concept that describes the decay which eats away extraordinary efforts to improve the learning environment of students. As long as the community's and families' needs are not being met by the larger society, then extraordinary efforts will be necessary to maintain a level of equilibrium to continue improvement efforts. Once a school begins to improve and exceeds the criteria for its students being at risk, district supports may begin to be removed and redistributed to other newly identified at-risk schools (Freiberg, 1989; Froechtling, 1987). Within a relatively short period of time, the school begins to be at risk of not sustaining the delicate equilibrium and safety net that provides a climate of growth and learning for students and their teachers. Given limited resources, the funding for extra supplies or specialized staff development is withdrawn and moved to another set of "at-risk" students and schools. The improving efforts begin to decay as the teachers and administrators see both intangible and tangible supports being removed. Add to the withdrawal of support, the attrition of teachers and the high mobility rates of students, the school becomes "at risk" again, in need of new interventions. Preventing decay in school improvement efforts may require sustaining support for as long as home and community conditions create students who are at risk of failure in schools and society.

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Four:

INVESTIGATING THE PEDAGOGY OF POVERTY IN INNER-CITY MIDDLE LEVEL SCHOOLS

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INTRODUCTION

In recent years, the number of middle level students who could be considered at risk of school failure or "educationally disadvantaged" has increased, and their degree of "disadvantage" has also increased. In the 1988 National Education Longitudinal Study (Hafner, Ingels, Schneider, & Stevenson, 1990), for example, about 41% of African-American eighth-grade students and 37% of Hispanic eighth graders were characterized as having two or more risk factors (e.g., from single parent homes, having a sibling who dropped out of school, or home alone after school three or more hours a day). Furthermore, the Carnegie Council on Adolescent Development (1989) estimated that about 25% of 10 to 17 year olds may be extremely vulnerable to multiple high-risk behaviors (e.g., school failure and substance abuse), and another 25% may be at moderate risk.

A major concern for middle level educators is that the percentages of students performing below grade level significantly increases between the third and eighth grade. Furthermore, the discrepancy between white and minority students also dramatically increases during this time span, with over 40% of African-American and Hispanic students being at least one grade level behind their expected and normal achievement levels by the eighth grade (United States National Center for Education Statistics, 1991). These findings and other indicators like the high dropout rates for Hispanics, African-Americans, and students in inner cities (Carson, Huelskamp, & Woodall, 1993; Garcia, 1994) and the failure of students to do well on higher-level applications, complex reasoning, and problem solving (Mullis, Owen, & Phillips, 1990) illustrate the critical status of students who are currently at risk of failure in our nation's schools.

Addressing the problems of urban schools is one of our most important national educational issues because the highest percentage of these students at risk of failure are found in these schools and the worst social and economic conditions are also found in inner-city neighborhoods (Cuban, 1989; Hodgkinson, 1991). Nowhere are the social implications of increasing numbers of disadvantaged families in inner cities more prevalent than in the large, urban school districts where the deleterious conditions of underachievement, student and teacher alienation, and high drop-out rates exist. Many of the physical structures and facilities in inner-city schools are abysmal and in desperate need of rehabilitation (Glass, 1991; Piccigallo, 1989). Large, urban school districts also face special challenges caused by factors like poverty, crime, and unemployment that make the solution to their educational problems very complex (Walberg, Bakalis, Bast, & Baer, 1988). In his critical analysis of the "truly disadvantaged underclass," for example, Wilson (1987) specifically describes how the plight of students in inner city or ghetto schools has deteriorated in recent years. He argues that "inner-city social isolation" is the major problem facing these large numbers of socially disadvantaged students who live in highly concentrated poverty areas. This social isolation is due in part to the flight of families to the suburbs and metropolitan fringes as well as by more affluent families who live in the inner city but choose to send their children to parochial or private schools. Consequently, most of the large, urban school districts are becoming overwhelming populated with working- or lower-class, minority students. Wilson (1987) argues that this "social isolation" prevents these minority students from interacting with individuals and institutions that represent mainstream society which creates further structural constraints and limits opportunities for social mobility.

The family circumstances of youth living in inner cities are also alarming. Approximately 20% of the children and youth in the United States live below the poverty level, and the largest concentration of poor children are in urban schools (Garcia, 1994; Kovach, 1991). Furthermore, the number of children and youth living in poverty is expected to more than double by the year 2026, and students from poor families are three times more likely to become dropouts than students from economically advantages homes (Garcia, 1994). These findings and other indicators like the high levels of crime, unemployment, drug dependency, broken families, illegitimacy rates, density of liquor stores, and concentrated poverty, clearly describe the critical status of students who are currently living in our nation's inner-city neighborhoods. Consequently, those students attending inner-city or ghetto schools represent the most imperiled group of our increasing numbers of students at risk of failure (Boyd, 1991).

Middle school students in inner-city schools may be considered to be the most vulnerable children because they often feel isolated and alienated, and consequently make poor decisions that have harmful consequences for them (Hamburg, 1993; Williams, Harper, & Henry, 1992). Furthermore, the transition from elementary school to middle grades has been found to be adversely related to many students' motivation and classroom behaviors. In particular, the early adolescent years have been found to be a transition period where some students begin to decrease their motivation and school-related behaviors which often lead to academic failure and dropping out of school (Eccles, Lord, & Midgley, 1991; Eccles, Wigfield, Midgley, Reuman, Mac Iver, & Feldlaufer, 1993; Hamburg, 1993). Some of the problems associated with the adjustment to middle level school include changes in (a) school structure, (b) expectations of independent learning, (c) reading material, and (d) classroom instruction (Irvin, 1992). The change in classroom instruction may be one of the most important variables to examine because middle level school teachers are typically subject-matter specialists who focus on the subjects' content rather than on the processes of learning or the psychosocial needs of their students.

Classroom Instruction in Inner-City Schools

Several different social, school, and classroom factors have been investigated in order to improve the education of students from inner-city schools. Educators, for example, have argued that some of the macro-level or distal variables previously described, like the concentrated levels of poverty in neighborhoods, have caused the deterioration of inner-city schools. Research, however, has generally found that these factors are *not* significantly and directly related to students' academic achievement (Wang, Haertel, & Walberg, 1993). While these social problems are quite serious and require us to formulate social policies to address them, they may not provide us with the solutions to the serious problems associated with the academic underachievements of students in inner-city schools. On the other hand, there is a growing body of research that has found that more proximal or "alterable" educational variables are directly and highly related to improved outcomes for students who are at risk of failure (Wang, et al., 1993). One such "alterable" variable that has been found to be associated with the underachievement of students in urban schools is the quality of classroom instruction. Classroom instruction has been found to be an important variable that can lead to improved student outcomes (Brophy & Good, 1986; Waxman & Walberg, 1991). In fact, there is a growing belief that the best way to improve urban schools is to provide them with better teachers and classroom instruction (Haberman, 1992).

There have been several studies that have documented the problems associated with classroom instruction for minority students and students at risk of failure. Several studies, for example, have found that some teachers provide differential treatment for some types of students (Babad, 1990, 1993). In particular, studies have found that teachers praise and encourage minority students less often than their white classmates and that teachers sometimes have lower expectations for minority students than their white classmates (Lucas & Schecter, 1992; Smiley-Richman, 1989; So, 1987). In addition, several studies have found that schools serving disadvantaged or lower-achieving students often devote less time and emphasis to higher-order thinking skills than do students serving more advantaged students (Allington & McGill-Franzen, 1989; Coley & Hoffman, 1990; Padron & Waxman, 1993). Lower-achieving students and minority students have often been denied the opportunity to learn higher-level thinking skills because it has been believed that they must demonstrate the ability to learn the basics or lower levels of knowledge before they can be taught higher-level skills (Means & Knapp, 1991; Foster, 1989). Furthermore, there is generally an emphasis on remediation for low achievers, which has resulted in teachers' lower expectations and a less-challenging curriculum for these students as well as an overemphasis on repetition of content through drill-and-practice (Knapp & Shields, 1990; Lehr & Harris, 1988). The result of these practices may lead to students adopting behaviors of "learned helplessness" and having a passive orientation to schooling (Coley & Hoffman, 1990).

In inner-city or urban schools, the most common instructional approach is the direct instructional model where teachers typically teach to the whole class at the same time and control all of the classroom discussion and decision making (Brookhart & Rusnak, 1993; Haberman, 1991; Padron & Waxman, 1993). Haberman (1991) argues that this over-reliance on direct instruction in urban schools constitutes a "pedagogy of poverty." He maintains that this teacher-directed, instructional style leads to student compliance and passive resentment as well as teacher burn out. Furthermore, he criticizes this orientation because teachers are generally held accountable for "making" students learn, while students usually assume a passive role with low engagement in tasks or activities that are generally not authentic. Several other educators have similarly attacked the current instructional practices used in inner-city schools and have strongly advocated that alternative teaching approaches be used (Brookhart & Rusnak, 1993; Padron & Waxman, 1993; Waxman, Padron, & Knight, 1991).

Despite all the problems associated with this basic skills, mastery orientation to teaching, there have been very few studies that have actually investigated the extent to which this orientation actually exists in inner-city classrooms (Padron & Waxman, 1993; Waxman, et al., 1991). Prior classroom observation research has either focused on specific teaching behaviors or general classroom behaviors and has not investigated more comprehensive approaches to instruction that examine both teacher and student behaviors. Similarly, most classroom observation studies have been conducted in elementary schools and have not specifically focused on middle level school instruction. Given the importance of the middle level school for fostering students' cognitive and affective development, it is extremely critical to investigate classroom instruction at the middle school level. The following section describes the use of systematic classroom observation and how it has been used to improve classroom instruction in previous studies.

Systematic Classroom Observation

One area that has important implications for the improvement of teaching and student learning is the use of classroom observation methods to investigate processes and behaviors that actually occur in classrooms. In the last three decades, there has been a great deal of research that has employed systematic classroom observation techniques in order to investigate effective teaching at the elementary, middle, and high school level (Brophy & Good, 1986; Stallings & Mohlman, 1988; Stallings, Needels, & Sparks, 1987). Systematic classroom observation typically uses an established system that specifies both the behaviors or events that are to be observed in the classroom as well as the procedures that are used in recording them (Medley, 1982, 1992). Generally, the data that is collected from this procedure focuses on the frequency with which specific behaviors or types of behavior occurred in the classroom and the amount of time they occurred.

Prior to the use of systematic observational methods, research on effective teaching typically consisted of subjective data based on personal and anecdotal accounts of effective teaching (Nuthall & Alton-Lee, 1990). In order to develop a scientific basis to teaching, researchers began to use the more objective and reliable measures of systematic classroom observation. In the past three decades, several hundred different observational systems have been developed and used in classrooms (Anderson & Burns, 1989). There have similarly been hundreds of studies that have used classroom observation systems during the past three decades. Although there are several types of observational procedures or techniques that have been used to examine effective teaching (e.g., charts, rating scales, checklists, and narrative descriptions), the most widely used procedure or research method has been systematic classroom observation based on interactive coding systems. These interactive coding systems allow the observer to record nearly everything that students and teachers do during a given time interval (Stallings & Mohlman, 1988). These interaction systems are very objective and typically do not require the observer to make any high inferences or judgements about the behaviors they observe in the classroom. In other words, such low-inference observational systems provide specific and easy identifiable behaviors that observers can easily code (Stodolsky, 1990).

Some of the major strengths of using classroom observation are that they (a) permit researchers to study the processes of education in naturalistic settings, (b) provide more detailed and precise evidence than other data sources, and (c) can be used to stimulate change and verify that the change occurred (Anderson & Burns, 1989). The descriptions of instructional events that are provided by this method have also been found to lead to improved understanding and better models for improving teaching (Copley & Williams, 1993; Good & Biddle, 1988; Stallings & Freiberg, 1991).

One important area, however, that has not been widely investigated within the study of classroom observations is that of examining classroom instruction in inner-city, middle level classrooms. The purpose of the present study, therefore, was to examine classroom instruction in inner-city, middle level classrooms through systematic classroom observation techniques in order to investigate whether a basic skills orientation or pedagogy of poverty exists in these settings.

Methods

Subjects. This study was conducted in a large urban school district located in a major metropolitan city in the south central region of the United States. The present study examined the quality of classroom teaching in 90 sixth- and eighth-grade classrooms from 16 inner-city middle level schools. The sample consisted of 16 middle level schools that were randomly selected from the entire population of middle level schools in the district. All the middle level schools in this district have a sixth, seventh, and eighth grade organization and are departmentalized for every content area. Most of the schools are large (i.e., 800+ students) and most do not have designated "houses" or "schools within schools." These middle level schools also do not use an interdisciplinary team approach, but they do have a disciplinary organization or departmentalized approach where they have a department head and common planning periods for members of the department.

The majority of the students in these schools were ethnic minorities (i.e., African American or Hispanic) and they generally came from families of low socioeconomic status. About 52% of the students were African American, 28% Hispanic, 19% white, and 1% Asian. Over 50% of the students in these middle level schools qualified for free or reduced lunch, and the average daily attendance in these schools was about 91%, while the mobility rate was about 35%. Students' overall achievement level was generally lower than the national average for nearly all of the grade cohorts. Sixth-grade students, for example, were one year behind in reading achievement, and by eighth grade they were about one and one-half years behind the national average. In mathematics, sixth-grade students were about one-third of a year behind the national average, and by the end of eighth grade they were nearly one full year behind average. Furthermore, only about 30% of all students in these middle level schools passed all three sections (i.e., reading, writing, and mathematics) of the state-wide competency tests which was administered to all seventh graders.

Approximately six teachers from each school were randomly chosen to be observed during either a reading/English, mathematics, social studies, or science class. A total of 90 teachers were observed from the 16 schools. About 55% of the teachers in these schools are African American, 41% white, and 4% Hispanic. About 50% of these teachers have advanced degrees and two-thirds of the teachers in these schools have at least 10 years of teaching experience. Only about 5% of the teachers in these schools have less than three years of experience. Approximately four students from each of these 90 classes were randomly chosen to be observed. A total of 356 sixth- and eighth-grade students were observed in these classes. Approximately 47% were observed in sixth grade and 53% in eighth grade. About 50.4% of the students were male and 49.6% were female. About 29% of the classes observed were reading, language arts, or English classes, 21% mathematics, 26% social studies, and 24% science.

Instruments. Two standardized observational instruments were used in the present study: (a) the *Classroom Observation Schedule* (COS) (Waxman, Wang, Lindvall, & Anderson, 1983), and (b) the *Teacher Roles Observation Schedule* (TROS) (Waxman, Wang, Lindvall, & Anderson, 1988).

The COS was used for collecting student classroom process data. It is a systematic observation schedule designed to document observed student behaviors in the context of ongoing classroom instructional-learning processes. Individual students are observed with reference to (a) their interactions with teachers and/or peers and the purpose of such interactions, (b) the settings in which observed behaviors occur, (c) the types of material with which they are working, and (d) the specific types of activities in which they engage. Approximately four students from each class were randomly selected (stratified by sex, if possible) to be observed. Each student was observed for 10 30-second intervals during the data collection period. The inter-rater reliability for the COS was .96 for the present study.

The TROS is designed to systematically obtain information on teachers and behaviors. Similar to the COS, it is a systematic observation schedule designed to document observed teacher behaviors in the context of ongoing classroom instructional-learning processes. Teachers are observed with reference to (a) their interactions with students, other teachers, or aides, (b) the settings in which observed behaviors occur, (c) the types of content with which they are working, and (d) the specific types of behaviors they are using. Each teacher was observed for 10 30-second intervals during each data collection period. The inter-rater reliability for the TROS ($r = .94$) was achieved in this study.

Procedures. Trained classroom observers observed each teacher with the TROS near the middle of the school year during a 50-minute time period. During this time period, four students from each class were randomly observed using the COS. The student sample was stratified so that there would be equal numbers of males and females as well as a representative sample by ethnicity. Multivariate analyses of variance results revealed that there were no significant differences for either the COS or TROS behaviors between the two grade levels (i.e., 6th & 8th) or among the four content areas (i.e., reading/English, mathematics, science, and social studies). Therefore, we combined the student and the teachers observations across grade and content areas for the subsequent analysis. Descriptive analyses were then used to summarize the amount of time various teacher and student behaviors were observed in these middle level classrooms.

Results

Table 4.1 reports the overall findings from the student observations. The predominant setting or context that was observed when students was whole-class instruction (77%), followed by individual or independent work (17%), and small-group instruction (6%). In these settings, students were observed not interacting (i.e., not talking to anyone) about 67% of the time. They interacted with their teacher about 25% of the time and with other students about 8% of the time. Nearly all the activities (99%) they were observed doing were teacher-assigned activities. The most prevalent activity that students were observed doing was watching or listening (41%). The next most prevalent activities were working on written assignments (22%) and interacting (5%).

Students were observed being on task about 94% of the time. They were observed being distracted about 3% of the time, and being disruptive and waiting for their teacher's help less than 1%. It should be pointed out that the standard deviations are quite large for all of the observed student behaviors, suggesting there is a great variance among the individual student behaviors in these classrooms.

Table 4.2 reports the overall findings from the teacher observations. Teachers were observed in whole-class settings about 61% of the time, followed by working at their desks (16%), traveling or monitoring students' work (12%), and at students' desks (5%). They were observed supervising in small group settings less than 3% of the time. Teachers were observed interacting with students regarding instructional issues about 76% of the time. Comparing this finding to the results from Table 4.1, where individual students were found interacting with teachers 25% of the time, it reveals that about 50% of the time teachers were talking or interacting with the whole class and not to any one student in particular. These interaction figures also reveal that teachers talk almost three times as much as students in the classroom. The findings from Table 4.2 also indicate that teachers were observed not interacting with anyone about 11% of the time, followed by interacting with students regarding their behavior (i.e., classroom management) about 10% and they were only observed interacting with students regarding personal issues about 2% of the time.

In terms of the purpose of the interaction, the predominant interaction focused on the task's content (54%), followed by responding to students' signal (19%), communicating the task's procedures (17%), checking student's work (16%), discussing students' work plans (12%), and praising student performance (10%). Teachers were observed spending very little time encouraging students to succeed (7%), showing personal regard for students (7%), and showing interest in students' work (8%). There was also very little time observing encouraging students to manage their own activities (5%), encouraging extended student responses (7%), or encouraging students to help each other (2%).

In terms of the nature of the interaction, teachers were observed explaining 43% of the time, commenting 23%, and questioning 20%. Very little time was observed listening to students (9%), cuing or prompting students (3%), or demonstrating (2%). It should be pointed out that the standard deviations are quite large for all of the observed teacher behaviors, suggesting there is a great variance among the individual teachers.

Discussion

The results of this study indicate that the classroom instruction in these inner-city middle level schools tends to be whole-class instruction with students working in teacher-assigned activities, generally in a passive manner (i.e., watching or listening). Students are on task most of the time, but about two-thirds of the time there is no verbal interaction with either their teacher or other students. There are very few small group activities and very few interactions with other students. Teachers were observed keeping students on task most of the time, focusing on the task, communicating the tasks procedures, praising students' performance, checking students' work, and responding to students' signals. They also spent more time explaining things to students than questioning students or cuing and prompting them. Teachers were not frequently observed encouraging extended student responses or encouraging students to help themselves or help each other.

These findings support some of the previous conceptual articles and personal accounts that have similarly argued that the basic skills orientation has been emphasized in inner-city schools serving disadvantaged or lower-achieving students and that these schools devote less time and emphasis to higher-order thinking skills (Coley & Hoffman, 1990; Padron & Knight, 1989; Padron & Waxman, 1993). In other words, the results of this study suggest that a basic skills, mastery orientation or "pedagogy of poverty" is emphasized in these inner-city middle school classrooms. The intellectual level of the curriculum was low and the culture of the classroom focused on "getting work done" rather than an emphasis on more authentic learning situations.

There are also many other implications that can be drawn from some of the specific findings from both the teacher and student observations. The lack of small group instruction and cooperative grouping, for example, is problematic given that it has been found to be a very effective instructional strategy and especially beneficial for African-American students (Allen & Boykin, 1992). The finding that students participated in few class decisions is also a serious concern given that developing students' self-directedness and responsibility are important educational goals. Another critical finding from the present study relates to the area of providing students with a positive, supportive learning environment. Teachers in this study were observed spending very little time interacting with students regarding personal issues, encouraging students to succeed, showing personal regard for students, or showing interest in students' work. These are all areas that have been found to be important for developing positive learning environments where students will become successful learners. Unfortunately, the shallowness of the relationships between students and teachers found in the present study were similar to findings from other studies from urban schools (Johnston, 1992).

Table 4.1
Means and Standard Deviations of Student Classroom Behaviors in Percentage of Time Observed (N=356)

1.	Setting		M%	SD
	A.	Whole class	76.81	30.84
	B.	Small group	6.13	18.20
	C.	Individual	17.06	27.14
2.	**Interaction**			
	A.	No interaction	66.80	35.78
	B.	Interaction with teacher	24.79	32.23
	C.	Interaction with support staff	0.08	0.91
	D.	Interaction with other students	8.24	15.59
3.	**Assignment of activities**			
	A.	Teacher-assigned activity	98.76	8.13
	B.	Student-selected activity	1.24	8.13
4.	**Type of activity**			
	A.	Working on written assignments	22.19	29.11
	B.	Interacting	5.34	12.18
	C.	Watching or listening	40.90	33.81
	D.	Reading	2.39	7.99
	E.	Getting/returning materials	1.26	3.88
	F.	Coloring, drawing, painting, etc.	1.15	9.76
	G.	Working with manipulative materials/equipment	2.13	11.96
	H.	Presenting/acting	.53	2.37
	I.	Tutoring peers	.00	.00
	J.	Not attending to task	1.85	5.90
	K.	Other	2.92	9.92
5.	**Manner**			
	A.	On task	93.90	15.52
	B.	Waiting for teacher's help	.08	.91
	C.	Distracted	3.13	10.46
	D.	Disrupted	.79	4.30
	E.	Other	1.53	6.48

Table 4.2
Means and Standard Deviations of Teacher Behaviors in Percentage of Time Observed (N=90)

Setting		**M%**	**SD**
A.	Teacher's desk	15.75	27.64
B.	Student's desk	5.29	12.22
C.	Small group	2.62	12.62
D.	Whole class	60.94	32.12
E.	Traveling	11.59	19.69
F.	Other	0.44	2.56
Interaction			
A.	No interaction	11.10	21.32
B.	Interaction with other adults	1.11	3.81
C.	Interaction with student(s)/instructional	76.06	29.62
D.	Interaction with student(s)/managerial	9.60	19.44
E.	Interaction with student(s)/personal	2.13	7.47
Purpose of interaction			
A.	Responding to student's signal	18.56	19.29
B.	Discussing student's work plans/progress	11.78	20.91
C.	Determining the difficulty of the task	3.33	7.50
D.	Communicating the task's procedure	16.56	17.43
E.	Communicating the task's criteria for success	6.22	10.23
F.	Focusing on the task's content	54.11	32.46
G.	Restructuring specific learning task	2.78	8.48
H.	Helping student complete work on time	2.33	5.62
I.	Checking student's work	15.56	21.36
J.	Encouraging self-management	5.22	11.83
K.	Encouraging students to help each other	1.56	4.22
L.	Encouraging students to succeed	7.22	11.90
M.	Encouraging extended student responses	6.56	13.17
N.	Showing personal regard for students	7.00	12.03
O.	Making contact with student in exploratory activity	2.89	9.15
P.	Showing interest in student's work	8.00	13.34
Q.	Praising student behavior	1.00	3.98
R.	Praising student performance	10.22	18.17
S.	Correcting student behavior	8.56	17.65
T.	Correcting student performance	2.33	5.62

Table 4.2 (cont'd)
Means and Standard Deviations of Teacher Behaviors in Percentage of Time Observed (N=90)

Nature of interaction		M%	SD
A.	Questioning	20.07	19.37
B.	Explaining	42.55	23.52
C.	Cueing or prompting	3.14	6.61
D.	Demonstrating	2.19	6.41
E.	Modeling	0.78	3.92
F.	Commenting	22.52	21.50
G.	Listening	8.73	12.63

A final issue that needs to be addressed involves the point that most of these teachers were very experienced and about half of them had advanced degrees. These teachers are doing an excellent job of keeping students on task, but the low cognitive demand of the tasks and the lack of a positive learning environment needs to be addressed. Teacher education programs at both the inservice and preservice levels should ensure that middle level teachers are provided with developmentally acceptable instructional practices (Manning, 1993). Teacher education programs should also develop teachers who can recognize and change the pedagogy of poverty (Brookhart & Rusnak, 1993). School administrators and instructional supervisors should similarly recognize the dangers of existing instructional practices and encourage teachers to change their current practices. Although there are many different approaches for changing classroom instruction, one approach that we highly recommend is using feedback from systematic classroom observations like those conducted in the present study. In several of the schools where we collected the observation data, for example, we provided the school with an individual school profile. These profiles contained the schools' individual data and a summary of the aggregated data across all the middle level schools. The school means for each of the indicators on both of the observation instruments were presented along with the overall school district mean value. This allowed each school to compare their school means to the district's average. In most cases, school meetings were held where all the teachers and administrators received the profiles and discussed the implications. Feedback from these profiles were used to stimulate dialogue and discussion about instructional strengths and weaknesses in the school. The profiles also helped initiate discussion about specific instructional areas that needed to be improved in the school.

It should be pointed out again that these profiles provided some guidelines for practice, they were not attempts to tell teachers what to do. These profiles provide teachers with concepts and criteria that they can use to reflect about their own teaching (Nuthall & Alton-Lee, 1990). We did not view the feedback session as one where we would apply our research findings into specific rules or guidelines for teachers to follow. Rather, the observational feedback was intended to be used as guides for teachers where they and their colleagues could reflect about their practices on their own and decide what action to take. Additional school-wide staff development programs would be appropriate if teachers wanted to build upon the strengths and weaknesses of their school's profile in order to help them improve their instruction. Quality staff development is one of the keys to successful middle level reform (Lewis, 1993), and classroom observation data can be the catalyst for this process.

Implications for Middle Level School Instruction

Middle level school instruction has generally emphasized drill and practice approaches and passive student learning as well as little active and interactive instructional approaches (Becker, 1990; Mac Iver & Epstein, 1993). Middle level school classrooms have also been characterized by greater teacher control and discipline as well as few opportunities for student decision making, choice, and self-management. Not surprisingly, this emphasis on "passive, drill-oriented instruction is significantly associated with students' greater boredom at school, lower rates of homework, completion, and less confidence that schoolwork will be useful in the future"(Mac Iver & Epstein, 1993, p. 526). Furthermore, given that the changing nature of educational environments has been found to be responsible for this decline of students' motivation and school-related behaviors (Eccles, Lord, & Midgley, 1991; Eccles & Midgley, 1989; Eccles, Midgley, & Adler, 1984), middle level educators need to provide better opportunities for students to learn and use more developmentally appropriate instructional strategies.

To address this critical problem of teaching in middle level schools, educators need to focus on developmentally appropriate instruction for improving the education of students at risk. This would include students interacting with other students in small groups or cooperative learning, as well as actively participating in school and classroom decisions (Irvin, 1992). An emphasis on developing middle level students' cognitive learning strategies is especially important and should include the direct teaching and modeling of cognitive learning strategies as well as techniques and approaches that foster students' metacognition and cognitive monitoring of their own learning (Irvin, 1992; Linn & Songer, 1991; Pressley & Ghatala, 1990; Waxman, Padron, & Knight, 1991). Some other instructional approaches that may be especially effective for middle level students include (a) providing opportunities for productive self-directed, independent learning (Thomas, 1993), (b) providing real-life problems for students to solve (Manning, 1993), and (c) changing the learning environment from a focus on ability-oriented goals, like grades or students' performance on tests, to a more task-oriented goal environment where learning is done for the sake of learning (Ames, 1990; Maehr & Anderman, 1993).

Other instructional approaches that have been found to be effective for students at risk of failure include (a) focusing on complex, authentic problems; (b) connecting school content with students' out-of-school experiences; (c) relating instruction to students' culture; (d) modeling cognitive learning strategies; (e) increasing dialogue and discussion in the classroom; and (f) addressing student-centered concerns (Brookhart & Rusnak, 1993; Haberman, 1991; Means & Knapp, 1991; Waxman, Padron, & Knight, 1991). By equipping middle level students with effective cognitive learning strategies for learning, critical thinking, and problem solving, some of the individual barriers to academic success faced by this group may be removed. Furthermore, if we can change classroom instruction in middle level schools to incorporate several of these approaches, then we can move from a "pedagogy of poverty" to a "pedagogy of enrichment" (Brookhart & Rusnak, 1993).

Implications for Future Study

Although research on middle level schools and students at risk of failure has made significant progress over the past decade, there are still additional areas that need further investigation. In order to capture all the processes and nuances that occur in middle level classrooms, triangulation procedures are needed to collect data from multiple perspectives (Evertson & Green, 1986). Collecting multiple measures or indicators of classroom processes may help alleviate some of the concerns and criticisms of observational research and provide us with a more comprehensive picture of what goes on in inner-city, middle level classrooms. Student and teacher self-report survey and interview data as well as more qualitative, ethnographic data (e.g., extensive field notes, shadowing data) could all be used to help supplement classroom observation data.

Although the findings from the present study suggest several important directions, further correlational, longitudinal, and especially experimental research is needed. Other research questions that still need to be investigated in this area include examining (a) the ideal or optimum levels and ranges of student and teacher behaviors that should exist in inner-city, middle level classrooms; (b) how teachers' beliefs, attitudes, and expectations influence their verbal interactions and classroom instruction; and (c) what other school-level variables or factors influence classroom instruction (e.g., school organization or climate). More studies are also needed to examine how schools and teachers can improve their classroom instruction. Similarly, more observation instruments that specifically emphasize inquiry-based or constructivist learning environments need to be developed and validated. Since observational research has not been able to explain how students cognitively interact with process variables (Winne, 1987), further research may need to specifically focus on students' cognitive operations and observations of students' responses. Finally, we need to conduct additional studies to investigate other important alterable factors that impact middle level students at risk of failure. These and similar issues still need to be examined so that we can continue to understand and improve the education of students from inner-city middle level schools.

CONCLUSIONS

The situation for disadvantaged youth in urban settings is particularly precarious. Students who live in these economically disadvantaged and socially dangerous environments are at great risk of academic underachievement (Garcia, 1994). As Lerner, Entwisle, and Hauser (1994) put it, "all of America itself is at risk because of the breadth of the problems facing what will be the next generation of America's adults"(p. 2). The plight of students at risk of failure in inner-city settings requires a societal response (Schorr, 1989). Changing the "cycle of desperation" for these students will require the collaborative efforts of many different groups (Futrell, 1988). Teachers, administrators, university professors and administrators, parents, social workers, health professionals, businessmen, community leaders, and the government need to form an alliance in order to address these critical problems. This process will also require a change in attitudes that will make all of us aware of the severity of the problems *and* seriously committed to reversing the cycle of educational failure for students in at-risk, school environments. One of the greatest tragedies related to this cycle is that many features of schools and classrooms have been found to be alienating to students and consequently drive students out of school rather than keep them in (Erickson, 1987; Kagan, 1990; Newmann, 1989; Waxman, 1992).

Given the magnitude of the social problems facing many students in inner-city schools, improving classroom instruction may appear to be only a small step towards correcting the serious problems facing these students. We know, however, that instruction can increase students' self-esteem, academic achievement, and reduce their alienation and boredom. Furthermore, schools can become "islands of tranquility" in the lives of these students. They can be very supportive of students and provide students with a sense of caring and community that may not be available elsewhere in their lives. Middle level schools have the opportunity to provide these kinds of environments for all their students. Rather than reinforcing the experience of failure, schools have the opportunity to help develop students' tolerance, sense of community, self-directedness, teamwork, cooperative learning, commitment, attitudes toward learning, participation, and engagement. Consequently, eliminating the pedagogy of poverty may be middle level educators' first step toward reversing the cycle.

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Part II

RESPONDING TO STUDENT DIVERSITY: EFFECTIVE PRACTICES AND POLICIES

Five:

SERVING STUDENTS AT THE MARGINS

Margaret C. Wang, Maynard C. Reynolds, and Herbert J. Walberg

INTRODUCTION

The way to get a story together is not to head first and directly to the center of it, but to start somewhere at the edges or margins. So says journalist James Reston (1991) in his memoirs. That may be the way to understand schools, too. In this chapter, we look to the margins; that is, to those students who have unusual needs and who challenge teachers to the limits of their commitments, insights, and skills. It assesses what can be done to achieve schooling success for diverse students today, particularly those in urban schools.

We refer to students who, for whatever reason, are struggling in their academic programs or in their social behavior in the schools; they are often at risk in their private lives and live in disordered communities.[1] We refer also to high-achieving students who are learning and adjusting to school life especially well; they receive far too little help in schools even though, just like other students, they need instruction that is adapted to their strengths.

"The State of Practice"

Disturbingly, there are disproportionate numbers of racial and ethnic minority children at the margins. It seems doubtful that progress has been made in serving such students since the War on Poverty of the 1960s or even since the Brown decision of 1954. African-American students, for example, are labeled retarded or behaviorally disturbed and set aside from regular classes at rates two or three times higher than white students. Similarly, they are suspended or expelled from school much more frequently than other students. No analysis of schooling situations is complete if it does not attend to this calamitous situation for minority students (Heller, Holtzman, & Messick, 1982).

Two assumptions undergird what follows. First, education should be appropriate for every student. Wave after wave of rhetoric and law have declared that all children, even those who are most difficult to teach, have a right to education--but the struggle to make it meaningful continues, especially at the margins.

Second, schools should be as fully integrated as possible. This means that separations, in whatever form, whether by race, gender, language background, abilities, or whatever, should be minimal and require a compelling rationale. The aim is for inclusive schools. The burden of proof lies with those who advocate separation of students. But, taking a look around, what do we see?

Special Education

Special education is offered in eight or nine varieties, with children labeled for the special places they go and the kinds of "disabilities" they have: learning disabled, mentally retarded, emotionally disturbed, blind, deaf, and so on. States award certificates to teachers qualified for each category.

Subsidies by state and federal offices amount to about $20 billion per year for special education. Some big-city school districts find a quarter of school expenditures going to special education. Federal and state regulations put these programs largely out of local control. Some cities maintain whole schools for special education programs and pay high costs to transport pupils.

Two of the largest categories of special education are for children who are learning disabled (LD) and for those who are mentally retarded (MR). The latter category is for students who score low on IQ tests and, thus, are neither predicted nor expected to learn well in school. We have already experienced deep difficulties in holding low expectations for many such children.

The LD category is for students who are the surprises, those who have slightly higher Iqs and who are expected to do well but are not actually achieving in basic subjects such as reading. Almost two decades ago, Featherstone (1975) foresaw that "[s]chools that carelessly mislabel poor children are very likely going to mislabel middle-class children as dyslexic or hyperkinetic" (p. 14). The 1990s terms are "learning disabled" and "attention-deficit disordered." LD was a relatively new label in 1975, but it is now borne by more than half of the disabled students in the nation's categorical special education programs. Regrettably, it remains to be shown that LD students can be reliably classified or better served in separate programs.

There is no separate knowledge base for teaching children classified as mildly MR or LD. Yet many districts use psychologists only to give tests, calculate discrepancies, issue expectations, and send children off to separate places with demeaning labels--all at high expense. Distinctive instructional practices are offered to students who are blind or deaf, and speech pathologists have distinctive credibility and utility. Emerging programs for severely disabled students also have justifiably distinctive features. But the remaining students--most of those presently classified as disabled--need intensive and individualized education rather than a different kind of education. There is even less need for state and federal authorities to send in monitoring teams to ascertain that programs are separate, all labels in place, and all paperwork in order.

Today's special education programs are contributors to the severe disjointedness of schools, a bad case of "proceduralism" (in which norms for procedures have surpassed norms for true substance or credibility in operations). The vast increases in student numbers in the LD category should be an embarrassment to American educators.

Chapter 1

Chapter 1 was started in the mid-1960s to assist poor, low-achieving children. At a cost of about $6 billion per year, this program serves about five million students, operating mainly by pull-out procedures. It provides little incentive for administrators to "pay attention to conditions and activities falling outside it" (Orland, 1993, p. 11). This isolation exists despite evidence that students served in Chapter 1 are nearly identical to those in LD programs (Jenkins, Pious, & Peterson, 1988). Their common characteristic is low achievement.

Chapter 1, fragmented and uncoordinated, adds to the disjointedness of schools, especially those with large numbers of poor students. A proper remedy requires a broad curricular approach, rather than narrowly focused skills training, and a renegotiated and greater integration with general education (Commission on Chapter 1, 1992).

The independent Commission on Chapter 1 called for remaking entire schools that serve poor children. The Commission's strategy, however, neglects other categorical programs. Chapter 1 is large among federal programs, but at the school level it is relatively small and, perhaps, not in a strong position to lead a major transformation of the schools. Why not proceed in a broader fashion in concert with other categorical programs and general education (Wang, Reynolds, & Walberg, 1993)?

Programs for Non-English Proficient and Limited English Proficient Students

Students who are non-English proficient (NEP) or limited English proficient (LEP) are at a disadvantage in their education. One noteworthy group is the large population of immigrant children and youth--more than two million in the 1980s--who enroll in the public schools of the nation, mainly in such large cities as Chicago, Los Angeles, Miami, and New York (McDonnell & Hill, 1993). A second large group consists of nonimmigrant children and youth who were born in one of the 50 states or District of Columbia but live in homes where languages other than English are spoken.

The evidence on outcomes of programs for children who are NEP or LEP is finite and controversial. On the one hand, bilingual instruction, which takes into account specific cultural and language differences, appears sometimes to be successful (Moll & Diaz, 1987). On the other, some observers believe that "bilingual education retards rather than expedites the movement of Hispanic children into the English-speaking world and that it promotes segregation more than it does integration" (Schlesinger, 1992, p. 108). The recent Rand report (McDonnell & Hill, 1993) makes a strong case for attending to the unique needs of NEP and LEP students in America's schools, but within the regular education framework.

School Demissions

A large group, dealt with in relative silence, overlaps the previous categories. It is comprised of students suspended and expelled from schools. As Frankel (1988) stated,

> After all, it's often the same kids . . . who've enrolled in less challenging classes or the "soft areas" of special education; who don't come to school regularly and who--to no one's surprise--drag down the group averages on the standardized achievement test results. (p. 2)

Data are sparse on the subject of school demissions (excuses, exclusions, suspensions, and expulsions). For the 1991-92 school year in Minneapolis, where 54% of students were minority and 46% were white, the primary causes for suspensions were: disrespect, lack of cooperation, shoving, scuffling, and fighting. Data show that

- 20% of the students were suspended at least once, and, on average, 2.4 times.
- 69% of those suspended were male.

- 36% of African-American students were suspended at least once.

- 30% of special education students were suspended at least once.

In the 1986-87 school year in New Orleans, African-American males accounted for 43% of the school population, but 58% of nonpromotions, 65% of suspensions, 80% of expulsions, and 45% of the dropouts. Nonpromotion is clearly a factor associated with dropouts, attendance problems, and suspensions (Garibaldi, 1992). Disruption is the frequent precipitating behavior for suspensions, and rates for such behavior increase as one moves up the grades. Yet there are promising practices to reduce suspension rates (Wager, 1992-93).

High Achievers

The most capable students in our schools, particularly the very few "resilient" students in inner-city schools who somehow manage to achieve exceptionally well despite adverse life circumstances, are no less burdened by poor identification and labeling systems than are low-achieving students. Few well-confirmed ideas and valid tools have been developed to serve these students. The advanced placement program and kindred procedures for accelerating the curriculum for able learners are helpful in secondary schools and in facilitating the transition to college. Numerous possibilities for advancing and enriching programs at earlier levels can be offered, but they require leadership, which is not always present except in the limited areas of athletics and, often, music.

General Observations about Categorical Programs

There are other categorical programs, such as those for migrant students, but rather than describe each of them, a few observations are offered about them all:

In the main, they are not working as intended. Categorical programs tend to be organized around factors thought to be predispositional to poor school learning. Thus, for example, several programs serve children from economically poor families and migratory families or children described as MR or LD. (Many specialists see the LD label as proxy for underlying perceptual or neurological problems--often with little or no evidence). The classifications are remote from what teachers can perceive and influence. The schools have organized programs separately, in accordance with categories specified in legislative action, even if there is no evidence that the programs work. Governmental bureaucracies, special funding streams, and monitoring systems have tended to force separation and to rigidify highly categorized but disorderly school systems. Broad accord is emerging in the view that there have been too few benefits from narrowly framed categorical programs and that there is need to recreate them in broader fashion in unity with regular education. In our view, programs at the margins should be organized around directly assessed instructional needs (Wang, Reynolds, & Walberg, 1993-94).

Most categorical programs operate, and are funded, on the basis of input variables, with little attention to outcomes. That is, students are qualified for special programs on the basis of their characteristics at time of entry. Their school districts immediately qualify for special subsidies as students enter the special programs. For funding purposes, it does not seem to matter whether or not the programs do any good. Evaluations have been difficult, but few show positive results, and many show negative results.

Categorical programs usually provide a limited curriculum and a simple problem-minimizing instructional mode (Scardamalia & Bereiter, 1989). Maintaining order, decreasing referrals to the principal's office, fixating on management, getting through the work sheets, and teaching simple skills have often sufficed. But today's world requires aggressive teaching for problem solving and complex thinking.

Lay people are beginning to ask mainstream educators why so many students are set aside in categorical programs. Are there not ways to reform general education so it meets the needs of all students, including the presently marginalized?

Program administration and monitoring by federal and state authorities reflect distrust in local educators. The result has been a growing, heavy load of rules and regulations enforced by bureaucrats. Lortie (1976) described teachers as feeling that they were "left at the far tail end of a long chain of moral insight" by policymakers. This is resented by teachers who work long hours with children and are then required to produce massive paperwork for distant monitors. The same regulations set an essentially judicial model for meetings of parents and teachers in planning school programs for individual children. The federal role in education programs has been to separate what should be integrated and to create distrust where trust is most needed.

We lack sufficient research and data on pupils and programs at the margins of the schools. Testing data and the large national databases often omit pupils in special programs (McGrew, Thurlow, & Spiegel, 1993), a practice which invites educators to inflate findings on average pupil achievements in their schools and districts. When there are no data, it is too easy to conclude that there are no problems or to leave them to vague approximations.

Recommendations for Reform

A few years ago, when a number of educators launched what became known as the Regular Education Initiative, a drive to unify categorical programs and regular education, a common criticism was that the only voices heard were those of a few specialists. Where, the critics asked, are the initiatives by regular educators? Now there is a cascade of such initiatives by leaders in regular education and by some others as well. These are some of the main principles that should be incorporated into the reform efforts for the next century:

1. **The public schools of the nation should be inclusive and integrated.**

This would mean:

- Reducing all forms of "set-asides" or segregation of students.
- Decreasing suspensions, expulsions, and dropouts.
- Merging Chapter 1, learning disability, and related programs.
- Placing "burden-of-proof" obligations on those who propose separating a student from the mainstream program.

- Integrating federal and state bureaucratic agencies across all categorical programs, including revisions in monitoring and reporting systems to emphasize teaming and coordination.

- Integrating professional groups, such as the Council for Exceptional Children (CEC), The Association for the Severely Handicapped (TASH), and the emerging union of the National Education Association (NEA) and the American Federation of Teachers (AFT).

- Setting a common "sunset" date for legislation affecting categorical programs, and organizing efforts to develop coherent, broadly framed revisions of policies and programs in all domains.

Narrowly framed and segregated categorical programs, as organized in the past, were unsuccessful. The National Academy of Science special panel (Heller, Holtzman, & Messick, 1982) saw no educational justification for maintaining separate programs for Chapter 1, learning disabilities, and mild mental retardation. It is interesting that recent federal reports in the field of special education show the two largest categories to be learning disabled and cross-categorical (U.S. Department of Education, 1992). The abandonment of the categorical approach for mildly disabled children may be occurring very rapidly. Between 1987-88 and 1989-90, a two-year period, the number of teachers employed in cross-categorical programs (23,000) increased 130.5%. That is one of the most remarkable statistics related to school programs of recent years. It seems likely that integration and coherence of programs for students will not fully occur unless and until bureaucratic and professional structures are pulled together. This presents a major challenge to the large bureaucracies and the professional education associations.

2. **The public schools should be organized into smaller units (mini-schools, charters, or "houses") in which groups of students and teachers remain together for several years of study.**

This would entail:

- Training all teachers (both general education teachers and specialists in various fields, such as second-language learning or special education teachers) for altered roles (such as working in mini-schools).

- Freeing local school teams (teachers, students, and parents) to innovate in significant ways to create revised programs.

- Making every possible effort to reduce alienation of students from teachers, classmates, and schools.

- Enabling students and parents to choose the mini-schools they wish to join.

- Permitting exceptional students to engage in activities beyond the mini-school when necessary to offer appropriate opportunities (e.g., the student athlete on the basketball team, the outstanding violinist who plays in the all-city orchestra, or the excelling mathematics student who attends an accelerated math program at the local university once a week).

- For the most severely alienated students, providing special opportunities in "street academies" that employ proven principles.

Alienation and estrangement of students and teachers are major problems at the margins of inner-city schools. The formation of mini-schools, within a framework of site-based management, extensive choice (by students, teachers, and parents), and major innovations in curriculum and instruction, appears promising. Within these mini-schools, categorical programs and staff, as we now know them, would be melded into the general programs to work collaboratively. A key feature is the unity of groups of students and teachers over several years. Mini-schools present opportunities for the implementation of principles emerging from research on resilience--especially relating to continuing contacts with children and youth by caring adults and the encouragement of self-efficacy.

3. **The use of labels for students (such as Chapter 1, learning disabled, mildly mentally retarded, and emotionally disturbed) should be discontinued.**

   This would involve:

- Shifting labels from students to programs.
- Making strong efforts to study individuals and plan individualized programs, but without labels.
- Shifting diagnostic activities from pathologies to educationally relevant variables, that is, the educational conditions that best promote learning, given the individual students' educational strengths and weaknesses.
- Changing special funding systems, which now frequently encourage a "bounty hunt" mentality, to one that pays off on programmatic units.
- Extraordinarily concentrating funds and resources in selected schools, such as those that enroll large numbers of low-achieving students from poor families or students facing the second-language learning challenge.
- Using "outcome-oriented" variables in choosing students who are offered specialized and intensive forms of education, and in monitoring program effectiveness.

Putting labels on programs may, of course, still cause labels to be assigned informally to students, but there should be improvements over present direct child-labeling procedures. One can imagine that programs might bear labels such as the Basic Skills program, Intensive Reading, Braille Reading, the Social Skills program, Reading Recovery, the English as a Second Language program, and so on. There is a tendency to organize programs around presumed dispositional variables, such as migrant status or mental retardation. It would be helpful if diagnostic procedures emphasized variables that educators can manipulate in their attempts to improve learning. An initial step might be to use outcome measures as a first approach in identifying students who need extra help.

4. **Research concerning "marginal" students should be enhanced as necessary to provide a growing knowledge base and credible evaluation system for inner-city schools, including attention to students and programs "at the margin."**

   This would require:

- All state and national data collection and dissemination systems intended to reflect the general status of education to include literally all students.

- The U.S. Department of Education to be given broad authority to grant time-limited waivers of rules and regulations to states and local school districts as one of the necessary conditions for increased innovation in programs and improved student learning outcomes, particularly in school program areas now governed by "categorical" laws, rules, and regulations.

- Research efforts to include careful and sensitive disaggregation of data to reflect differential effects and conditions for various racial, ethnic, and gender subpopulations.

- Research that attends to strengths, resilience, and similar "positive" factors, as well as to limitations and deficiencies in inner-city life and learning.

- Efforts to study the change process, particularly as it relates to changing beliefs and assumptions about the capacity for learning by *all* children, including children marginalized in schools.

It is important to have truly complete data ("all the way to the margins") when attempting to represent all students and programs. A case can be made for disaggregating data for subgroups, such as for race and gender, as an aspect of research. Such disaggregation of data does not imply physical separation of students within the schools, but only of data showing, for example, how various racial, ethnic, and gender groups are advancing in their learning under various conditions.

5. **Strong efforts should be made to advance programs for students who show outstanding abilities.**

This would entail:

- Offering beginning programs in important domains of learning in which all students participate and in which extraordinary efforts are made to give students whose background or experience has been disadvantaged an opportunity to show their potentialities for accelerated learning and high competence.

- Adapting programs for students who emerge from introductory programs with evidence of readiness (shown in learning rate, motivation, commitment to task, etc.) for especially challenging and accelerated instruction.

6. **Clearly a necessity, maximum implementation of the well-confirmed knowledge base for teaching in inner-city schools should be sought.**

This would require:

- A strong and continuing staff development program for all teachers and school staff, based on "what works" in instruction, and the knowledge base on learners and learning.

- Systematic efforts to place teachers of highest demonstrated competence in inner-city schools.

- Aggressive teaching--with high expectations for learning--for all students, in a curriculum that includes complex topics, such as problem solving and communication, in addition to literacy basics.

- Strong efforts to extend and improve early education programs and development of all promising approaches to the prevention of learning problems.

7. **Efforts should be made to maximize coordination, within institutions of higher education, of programs in the various "categorical" fields and in general education.**

This would involve:

- Combining elements of programs in general teacher education, special education, and special language learning areas.

- Relating preparation of teachers, school administrators, school psychologists, and others to newly emerging forms of education (such as mini-schools).

- Educating the public about what is needed and encouraging public dialogue on the needs and purposes of school reforms to ensure equity in educational outcomes for *all* children.

8. **Efforts should be made to strengthen and meld the work of advocacy groups.**

This would mean:

- Supporting revised and integrated forms of schooling and funding for special programs.

- Working in support of efforts to coordinate the emerging school-community agencies designed to provide broad patterns of service to children who have special needs and to their families.

9. **Federal and state authorities should be challenged to create broad, cross-departmental, and coterminous "empowerment zones" as a basis for comprehensive developments and services.**

This would involve:

- Building healthy communities.

- Fostering healthy, well-supported families.

- Linking school programs and the community to enhance opportunities for learning.

There is a tendency for various departments of government to undertake separate and uncoordinated programs intended to help solve the problems of inner cities. We observe "enterprise zones," for example, in which moves are mainly related to business and job opportunities. But rarely are there coordinated efforts in education, human services, transportation, corrections, and other fields in support of enterprise zones. The goals should be to achieve simultaneous declarations of empowerment zones by all departments of government and to organize broadly coherent efforts for improvements in inner-city life and learning.

10. **Concepts of inclusion and integration should be applied also to the bureaucratic structures of government, professional organizations, and advocacy groups.**

CONCLUSION

At the margins of inner-city schools, one finds much disorder, alienation, segregation, and rejection--and many highly reluctant learners. A part of the problem is the federal participation in programs that has come mainly in the form of narrowly framed categorical programs. It appears that most such programs have "not worked" adequately, and the new strategy is to rework and improve general school programs as the main resource for all students, including those "at the margins." A current difficulty is that government agencies, funding systems, professional associations, university training programs, and advocacy groups are highly disjointed. Many rules, regulations, and laws also cause continued frustrating separations where coordination is to be preferred. It will be difficult to work through these problems. There will be resistance by some who are rewarded by present practices. Paradoxically, some of those who fought hard for rights and opportunities for various categories of students may now defend structures they helped to create in the past but which now operate as barriers to needed change. It will take much courage to lead the way to new, more coherent, and genuinely useful programs at the margins of the schools, and to bring the schools into broader collaborative efforts for community betterment.

Endnotes

[1] The term "students at the margins" could be "students at risk," "exceptional students," "disadvantaged students," and "gifted and talented students." Each term lacks full clarity. Each has its critics. We use them all and somewhat interchangeably, trusting to the reader to understand and tolerate our roundabout approach to a construct with many names and nuances.

[2] For a sampling of the voices among educators, see R. L. Allington and P. Johnston, (1986), "The Coordination Among Regular Classroom Reading Programs and Targeted Support Programs," in *Designs for Compensatory Education: Conference Proceedings and Papers*, edited by B. I. Williams, P. A. Richmond, and B. J. Mason (Washington, DC: Research and Evaluation Associates), pp. 3-40; S. Epps and G. Tindal, (1987), "The Effectiveness of Differential Programming in Serving Students with Mild Handicaps: Placement Options and Instructional Programming," in *Handbook of Special Education: Research and Practice. Vol. 1: Learner Characteristics and Adaptive Education*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg (Oxford, England: Pergamon Press), pp. 213-248; B. K. Keogh, (1988), "Learning Disability: Diversity in Search of Order," in *Handbook of Special Education: Research and Practice. Vol. 2: Mildly Handicapped Conditions*, edited by M. C. Wang, M. C. Reynolds, and H. J. Walberg (Oxford, England: Pergamon Press), pp. 225-251; L. M. McDonnell and P. T. Hill, (1993), *Newcomers in American Schools* (Santa Monica, CA: Rand); and M. E. Orland, (1993), *From the Picket to the Chain Link Fence: National Goals and Federal Aid to the Disadvantaged* (Washington, DC: National Education Goals Panel).

The explicit recommendations noted here were derived through discussion at the Invitational Conference on Making a Difference for Students At Risk, which was sponsored by the National Center on Education in the Inner Cities in collaboration with the National Research Center on Cultural Diversity and Second Language Learning, October 14-15, 1993. See M. C. Wang, M. C. Reynolds; and H. J. Walberg (Eds.), (1993), *Epilogue: A Summary of Recommendations* (Philadelphia, PA: Temple University Center for Research in Human Development and Education).

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Six:

ORGANIZING SCHOOLS INTO SMALL UNITS: THE CASE FOR EDUCATIONAL EQUITY

Diana Oxley

INTRODUCTION

The national reports on education that appeared in the 1980s created a virtual tidal wave of interest in organizing middle and high schools into smaller units. Nearly every prominent analysis of secondary schools touted schools-within-schools and house systems as means of addressing key educational problems such as students' lack of engagement, a fragmented curriculum, and weak teacher collegiality (Carnegie Foundation for the Advancement of Teaching, 1988; Committee for Economic Development, 1982; Goodlad, 1984; National Coalition of Advocates for Students, 1985)[1]. In response, house systems have been mandated in school districts across the country, as have similar strategies for creating charter schools or schools of choice within a single school building. New York City, Rochester, New York, and Columbus, Ohio have adopted house systems at the high school level; Philadelphia has embraced a charter school plan for all 22 of its comprehensive high schools; Los Angeles and Philadelphia have implemented small units at the middle school level; and Chicago is pursuing the concept at all levels of schooling.

Indeed, smaller educational units appear to have many advantages over large schools. Small units create a more stable, intimate, and thereby supportive context for teaching and learning. Small units organize teachers around students instead of parts of the curriculum. Further, they encourage a coherent program of study, and assign particular teachers collective responsibility for their students' success. Finally, small units provide a basis for a decentralized system of school management in which classroom teachers have greater authority and flexibility while parents have readier access to teachers.

But despite the enormous potential of small-unit organization to help all students reach high levels of academic achievement, it carries a risk. If educators allow subschools to segregate students of differing achievement levels and socioeconomic backgrounds, as academic tracks and special-needs programs currently do, the subschool concept will fail to realize its full potential. My purpose here is to demonstrate the advantages of small-unit organization over large schools for all students, particularly low-achieving students, and to describe an approach to small-unit organization that provides alternatives to student sorting and homogeneous grouping practices. Since this approach challenges deeply rooted educational methods, I also discuss some of the ways that educators have overcome professional and political obstacles to reform.

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[1] For an extensive list of resource citations on small-unit restructuring, see Appendix A.

Advantages of Small-Scale Schooling

Large schools appear to have some economic advantages (perhaps only because cost-benefit analyses fail to reckon the costs of underachievement, dropout, and vandalism with which large schools are associated), but they are primarily a tool of curriculum specialization. Over the last several decades, as economic demands for higher skilled workers grew, fewer and fewer students left school early to take jobs. Educators responded by diversifying the curriculum and encouraging growth in school size, since a large school population is needed to support a large number of specialized courses. A broader array of courses was offered, and students were steered into different academic tracks in an effort to match their varied interests and abilities with different curricula (Cohen, 1985).

Educators altered the curriculum rather than the way they taught it on the assumption that students have different aptitudes for learning and thus require different levels of material. Now economic pressures, revised theories of learning and intelligence, and the poor results of specialized courses and programs have severely challenged these assumptions (Gardner, 1985). The present secondary school curriculum is out of step with current economic demands for both a greater mastery of basic skills and higher order thinking skills. "Less is more" proponents have succeeded to a large degree in focusing curriculum reform efforts on intensifying instruction of basic subjects (Sizer, 1985). Research indicates, in particular, that academic tracking is neither an effective nor equitable method of organizing instruction (Oakes, 1985). Remedial courses tend to put students farther and farther behind until, eventually, they drop out (Grannis, 1991). Special-needs programs like Chapter 1 have also shown little benefit (Commission on Chapter 1, 1992; Wang, Reynolds, & Walberg, 1988).

By contrast, small-unit organization supports a more coordinated and concentrated approach to instruction. Small units complement academic departments in that they provide a vehicle for cross-disciplinary collaboration. Within a unit, teachers share a group of students in common rather than a discipline. They are able to work together to unify instruction and allow students the opportunity to exercise skills and knowledge across subject, for example, utilize math skills in a science class. Further, each subunit must employ a core curriculum that is common to all its students, since its small scale cannot support diversified curricular offerings, academic tracks, and remedial programs. A shared learning experience is one of the most important ingredients of a cohesive learning community.

The idea of organizing schools into smaller units is certainly not new--as far back as the 1960s educators were intrigued with the notion. But this early interest amounted only to a brief flirtation--partly because it opposed curriculum expansion. The aim of the house systems established in the sixties and seventies was to reinstitute schooling on a human scale. But educators were simply unable to establish houses in an educational culture dominated by curriculum options and academic department structure. Few house systems survived to the present, even where schools were architecturally designed to accommodate them. But now that academic tracks and myriad course offerings have been recognized as more of a problem than a solution, educators may have greater success in creating intimate and supportive learning contexts.

Today, the alienating effect of large schools is perhaps more profound than ever. Schools in the United States, urban as well as rural, are enormous: high schools regularly enroll 2,000 to 3,000 students. Even U.S. elementary schools, which average close to 400 students, are about twice as large as those of other industrialized countries. Yet secondary schools of more than 500-600 and elementary schools of greater than 300 are difficult to defend on educational grounds (Goodlad, 1984). A sizable body of research indicates that large school size adversely affects attendance, school climate, and student involvement in school activities, while contributing to higher dropout rates, vandalism, and violence (Garbarino, 1978; Lindsay, 1982; Pittman & Haughwout, 1987). Further, the social and psychological support formerly provided by families and communities appears to have declined across all income groups, especially among the urban poor, suggesting that today's students may be even less able to cope with large schools.

Small-unit organization, on the other hand, allows teachers and students in large schools to form bonds of familiarity, identification, and support. In small units, comparatively small numbers of students and teachers interact with one another; these groups are stable across years, and the range of activities they share is expanded. Under these conditions, students and teachers are more likely to get to know one another, to respect and support each other.

Small-unit organization also has the potential to bring about significant changes in the traditional shape of school governance. Small units lend themselves to a decentralized system in which unit leaders assume authority to orchestrate unit activities. Unit leaders are better positioned than centralized administrators for two-way communication with teachers, students, and their parents, and at the same time not so burdened by administrative work that they are unable to teach any classes. The tension between administrators and instructors that normally exists in large schools with centralized management is less likely to develop.

At a time when traditional school management structures have come under strong attack, and school reforms such as school-based management and broadened input into decision-making have become the watchwords of the reform movement, the small-unit plan defines an alternative organizational structure that supports such reforms. Here again, the research on school size bolsters the claims: it suggests that one way in which large schools produce negative student outcomes is through their adverse effect on school management, particularly on consensus-building and staff involvement in decision-making (Bryk, Lee, & Smith, 1990; Crain & Strauss, 1986).

Looking Out for Educational Equity

This conjunction of trends in reforms across interrelated dimensions of schooling would bode well for small-unit plans if not for another potentially conflicting reform objective. That is, educators see in the small-unit plan a means of broadening the array of programs from which students can choose to satisfy their interests and needs. Many district and school administrators want to extend greater choice to students, particularly in inner-city neighborhood schools with restricted curricular offerings. They also see the plan as a way of improving these schools' marketability. To the extent that subschools are made to offer distinctive academic programs, they may allow neighborhood schools to compete with magnet programs for higher achieving students and thus to create a more diverse student body.

While the aim of expanding student choice has merit, it tends to divert attention from considerations of increasing academic achievement and educational equity. The history of school reform suggests that when educators try to fit educational programs to students' extant interests and needs, they fail to maintain high expectations of academic achievement for all students; concern for the kinds of practices that enable all students to reach high levels of achievement is overwhelmed by interest in curriculum development. Consequently, small-unit organization plans designed to create differentiated educational programs pose the real danger that students will continue to be held to different standards, as is currently the case in different academic tracks and special-needs programs.

Can efforts to provide students meaningful educational options be reconciled with the need for substantive commitment to a higher level of educational attainment for all students? Perhaps, but only if educators squarely face the problem as they pursue the development of subschools of choice. It is not as simple as mandating that small units be designed for heterogeneous groups of students. Educators have piecemeal knowledge of effective classroom practices for heterogeneous instructional groups, but lack information about how to reorganize instruction on a schoolwide basis to provide equal access to quality instruction. Such reorganization requires radical changes in the structure of special-needs programs, the curriculum, and teacher roles. There is not even a consensus yet among educators that academic tracks should be eliminated, or that all students should be required to demonstrate minimal educational outcomes; many are still convinced that some children cannot reach a higher level of educational excellence and should be steered into vocational education.

Oakes (1993) points out that radical reforms like detracking schools and providing equal access to educational opportunity require technical solutions as well as resolving the normative and political impediments to making such changes. Technical solutions must specify a comprehensive set of changes in school organization, curriculum, and instructional technique. In addition, educators need to be able to examine successful models if they are first to be convinced that they are possible and then to emulate them.

An Approach to Small-Unit Organization

In the next section I delineate an approach to small-unit organization that is geared to meeting students' diverse academic needs in "regular" classrooms. The essential features of small-unit design are culled from research on a wide range of schools that have created subunits. The research provides evidence that subunits whose design incorporates these organizational and instructional features have more favorable effects on students than those that do not. Such subunits are associated with greater teacher knowledge and familiarity with students, with students' sense of community and belonging, and with higher rates of attendance and academic achievement (Felner, 1982; Oxley, 1990, 1993). To provide richer details of small-unit design, I also describe the organizational structure and instructional practices of two schools with quite different small-unit plans. These schools demonstrate that the key elements of small-unit organization can yield a range of designs.

One of the schools is Koln-Holweide, a German comprehensive secondary school. American educators became interested in this and other German comprehensive schools a few years ago because of their extraordinary commitment to democratic school governance and teaching methods. Koln-Holweide's small-unit structure undergirds its governance and instructional methods. The school contains grades 5-10, plus an upper school of grades 11-13 for college-bound students. Koln-Holweide presently serves a student body of 1,600, about 25% of whom are immigrants, mostly Turkish. Many students are from poor, single-parent families. Koln-Holweide is an important case because its large numbers of students from lower socioeconomic and differing cultural backgrounds put its organizational structure and methods of instruction to a stringent test. With very few exceptions, all students complete 10th grade on time, compared to a national dropout rate of 14%.

The second school is William Penn High School, which serves students in grades 9-12. It is located in North Philadelphia, an area which has declined economically over the past few decades. The school was built to accommodate 2,500 students but currently serves 1,800, nearly all African American. A large majority are poor and qualify for free and reduced-price lunch programs and are eligible for

Chapter 1 and special education programs. As part of a district-wide high school restructuring initiative, William Penn staff are in the midst of organizing the school into several charter schools. One of these subschools was designed to demonstrate effective organizational and instructional methods for heterogeneously grouped students. The dedication of the charter coordinator, in combination with the support of the restructuring project and Temple University, has succeeded in shaping a highly innovative and promising charter school.

Essential Features of Small-Unit Organization

The organizational requirements for small-unit schooling represent a highly interrelated set of features, each of which supports the others. The omission of one feature would seriously weaken the overall effectiveness of the small-unit approach. Yet these defining elements do not comprise a rigid formula that leaves no room for creativity. Koln-Holweide uses a horizontal plan in which each small unit contains students at a single grade level, while William Penn's vertical plan organizes a number of students from all grade levels into each unit. William Penn's small units are organized around different curricular themes and provide instruction in core subjects only, leaving electives organized on a schoolwide basis. At Koln-Holweide, the same curriculum is used for all students, and students receive all instruction within their units.

Instruction

Small-Unit Structure

All students and staff are organized into units of not more than 500 students for instruction. Units should be large enough to allow staff to teach exclusively within them, but small enough to allow staff and students to become well acquainted. A frequently suggested maximum size for a unit is 500, since it is then theoretically possible to know everyone by name.

A common pitfall of small-unit organization is the failure to organize *all* students and faculty into the small units. Students with special programming requirements, such as those in categorical programs or assigned to remedial classes, are often left out of the small-unit plan altogether. The existence of educational programs outside the small-unit plan has a seriously destabilizing effect. It increases organizational complexity to the point that the combination of program, class size, teaching load, and other constraints makes it impossible to assign teachers exclusively to a small unit--a requirement that should not be compromised, at least in relation to core subject area instruction.

Small units are not based on differing abilities. Students should be assigned to small units on the basis of random selection, student choice, or another method that insures a heterogeneous mix of students with respect to past achievement. Small units should not be organized around existing academic tracks, categorical programs, or other specialized programs, since this would heighten the social and instructional segregation of these students. The effect would be to create destructive social comparisons, perpetuate the practice of tracking (which has proven ineffective), and limit the use of promising educational strategies such as peer mentoring and cooperative learning.

The curriculum is common to all students. Unit staff employ a single curriculum for all their students. They integrate students from special education and other programs into regular classes. The staff's goal is to create a shared learning experience for students by eschewing the use of homogeneous grouping strategies.

Students remain in the same unit across years. Once assigned to a unit, students and teachers remain in it as long as they are in the school. In this way, teachers and students can capitalize on the knowledge that they acquire about each other from year to year. Teachers can also monitor students' progress more effectively. They are in a much better position to identify new trends in behavior and academic performance that may lead to course failure, and to intervene before failure actually occurs. Likewise, they can identify and nurture an emerging interest. The ability of a small group of teachers to follow students across years strengthens the system of accountability for student success. Under the present system, teachers have little influence over the practices of their students' previous and subsequent instructors. They assume responsibility for only a small segment of the student's education, and no one teacher or group of teachers assumes responsibility for the student's education as a whole. While many are convinced that educational improvement requires extended instructional time, it is also clear that teachers can increase the efficiency with which they instruct simply by organizing themselves to provide greater continuity of instruction to students.

Subunit Structure

The unit is divided into instructional subunits containing an interdisciplinary team of teachers and their students. The division of schools into small units creates an organizational climate conducive to teaching and learning that, while not alone sufficient, is not easily achieved on a schoolwide basis. The subschools themselves must be divided into instructional clusters composed of an interdisciplinary team of teachers and a group of students they share in common. The organization of teachers across subject areas represents a student-centered approach to education concerned with the student's intellectual development as a whole. Further, the team-small group structure gives teachers greater flexibility in organizing instruction. Since each team provides most if not all of their students' instruction, team members can arrange class time to accommodate extended instruction, field trips, and projects without upsetting the school's master class schedule.

Teacher teams coordinate instruction across subject areas. The team/small-group concept stands in marked contrast to traditional, curriculum-centered education, which forces students to take a series of unrelated courses. Interdisciplinary teams can coordinate instruction to allow students to reinforce their learning of facts and skills across several subjects. Teams also facilitate teaching concepts and skills in the context of engaging, real-world endeavors which ordinarily involve diverse abilities. Finally, the cross-disciplinary team allows for joint problem solving and coordinated intervention in relation to individual students.

The day or week is structured to give teams time to meet. In order for team members to coordinate their work, they must be able to meet during the school day. Daily meetings may be unnecessary, but team members' daily schedules should be coordinated so that they can meet as often as necessary. Team members' preparation periods can be scheduled during the same time slot and back to back with lunch to accommodate team meetings.

Teacher specialists work with instructional units. Teacher specialists such as Chapter 1 reading and math teachers and special education instructors work with each interdisciplinary team to provide support for regular classroom teachers and designated students. These specialists function as peer coaches; they observe classrooms, engage in joint problem solving, model techniques, and team teach. Specialists also work directly with designated students in their regular classrooms rather than in isolation from regular students.

Teacher teams meet with parents. Whereas teachers in large, impersonal schools are mostly frustrated in their efforts to involve parents in the education process, those in smaller subschools have greater success. Even more important, however, teams have access to parents and vice versa. Teams often benefit from parents' support and assistance in developing and carrying out interventions with children. Conversely, parents want to have contact with their children's teachers as opposed to school officials who are less familiar with the students. Team organization often allows a parent to obtain desired information from one teacher as opposed to having to contact all of the child's teachers. The longer that teams stay with students, the easier parents will find it to interact with teachers.

Instructional Features of Koln-Holweide Comprehensive School

Unit and subunit structure. At Koln-Holweide, each grade level is organized as a semiautonomous unit, comprised of approximately 225 students and 18 to 22 teachers. Within each grade-level unit, teachers are organized into three teams of 6 to 8 teachers, depending on the number of part-time teachers. The latter group includes the principal and assistant principals, all of whom teach a reduced classload.

Each team is responsible for the education of three classes of students; the team must cover all subjects. Since each team has only three classes, instructors teach two academic subjects and cover additional class periods (homeroom, independent learning, project work, or a third subject) and lunchtime activities. Unlike U.S. teachers, German teachers have training in two subject areas. The team and its students remain together through grades 5-10. In the fifth grade students are assigned to a team in accordance with the goal of distributing disabled, Turkish, slow and fast learning, and male and female students equally across the three teams. With only minor adjustments, these groupings are maintained across grade levels.

Teachers at Koln-Holweide view the team as their most valuable educational tool, not only because each team has an exclusive arrangement with its students, but also because each team exercises a high level of instructional autonomy. Team members devise each year's schedule, decide who will teach what courses, and plan parent activities. However, teams do not function in isolation. They coordinate instruction with other teams at the same grade level, and teachers collaborate regularly with other teachers in their academic department throughout the school. Nevertheless, the team has enormous flexibility in organizing instruction on a week-to-week and year-to-year basis.

Teachers at Koln-Holweide believe that a close, stable relationship between teachers and students is a necessary condition for effective education. Rarely is a student or teacher reassigned to another team for any reason. Teachers' multiyear relationship with students allows them to gain extensive knowledge of students and their families. For example, one team noted uncharacteristically unruly behavior on a student's part, brought it to his parents' attention, and together they discovered that the student was abusing drugs.

Academic program. The German education ministry dictates curriculum content in terms of what knowledge and skills should be mastered at each grade level, as well as the testing schedule. Standards for completion of the lower school, grades 5-10, are high. Like U.S. students, German students take math, language arts (German), science, social studies, a creative arts elective, and physical education each year. But, in addition, German students have shop, religious education, and hefty foreign language requirements: in fifth grade, they begin English, and in the seventh and ninth grades may add a second and third foreign language.

Academic tracks do not exist in grades 5 and 6. Contrary to school philosophy, however, national law requires students to be grouped into higher and lower math and English language classes in grades 7 through 10. Participation in the higher tracked courses and above-average grades are the entry criteria for the upper school. Teams minimize the effect on students by accommodating the requirement within the structure of the team/small group. They create and instruct a fourth, lower track class in math and English when students reach seventh grade. Students are integrated with all other students in the remainder of their classes.

Special education students, including those with learning and behavioral problems and physical and intellectual disabilities, are mainstreamed at Koln-Holweide. One special education instructor is assigned to each team with disabled students, two if students' disabilities are severe. Not every team has disabled students, however. Regulations require that at least three special education students must be assigned to a class to have its size reduced from 30 to 22 students. As a result, disabled students are concentrated in about half of the classes. Specialists work with students in the context of their regular classes. In addition, classroom aides, who are sometimes adults performing alternative military service, assist special education students.

Turkish students in grades 5 through 8 receive four periods per week of instruction in their native language. In grades 9 and 10, all students may take a second or third foreign language in addition to English (begun in grade 5) and French (possibly added in grade 7); Turkish, Spanish, and Latin are offered as foreign language electives.

Instructional methods. Students work almost entirely in groups, and subject area instruction is mixed with several periods of advisement, free learning, and special projects not tied to a specific subject. Tests are given six times a year in foreign languages, German, and math. They are not standardized tests, however; each is constructed by the group of teachers who teach the subject at particular grade levels in each school.

In each class, students are organized as table groups. The groups are heterogeneous in terms of gender, ethnicity, and ability. The students belong to the same table group in each course throughout the year. This affords students ample opportunity to learn how to work effectively with others in their group; they do not lose time learning how to work with a different group in each class. Table groups meet once a week to tackle problems they encounter in working together; twice a year they take stock of the group's progress. Group members are expected to help each other and to contribute to the group's mastery of the work. Groups work independently of the teacher during much of the class. Their work assignment for a two-week period of time is often posted in the classroom. While groups work on an assignment during the period, the teacher may work intensively with a group who failed the last test or move from group to group to check on their progress.

Instructional organization. Koln-Holweide has an extended school day, 8:15 a.m. to 4:15 p.m. Students spend about the same amount of time in class per week as U.S. students; the extra time is allocated to staff meetings, lengthy lunchtime activities, and a mid-morning break. On a daily basis, the work of teaching and learning at Koln-Holweide is pursued in a more varied and less concentrated fashion than in U.S. schools. Over the year, however, students receive more hours of formal instruction than U.S. students, since the German school year is much longer.

Since each team covers all of its students' courses, the team can organize the class schedule as it wishes. Some teams begin the week with a free learning period devoted to orienting students to the week's work and end it with a special activity organized by one of the classes. Students' schedules vary throughout the week and allow for several double instruction periods as well as periods for individualized work, tutoring, and special projects. Teachers can offer this variety of instructional periods because they are not required to provide five periods of formal instruction in each subject. The precise number of periods varies with grade level and subject.

In the homeroom/tutorial, a pair of teachers, usually one male and one female, assumes one of their classes as a tutorial group. They keep attendance and other records on students and provide individual advisement. The pair meets with their students for two periods a week, one of which is devoted to human relations and sex education and the other to general student concerns. Tutorials are also called circle groups because teachers and students arrange themselves in a circle to facilitate face-to-face interaction. The circle also signals the operation of a kind of egalitarian group process to which teachers and students alike must adhere; both must observe the same set of rules governing verbal interaction.

Teachers also supervise students' free learning periods, of which there are several per week. These are unstructured periods devoted to students' individual needs and interests. The teacher may help students with their class assignments, advise them individually, tutor those who have failed a test or fallen behind in a class, or guide students' pursuit of special interests. Students who fail a test use their free learning time to work on the covered material with their teacher until they are ready to retake the test. In this way, all students are able to master the work, and none must repeat a course or grade. Free learning is an important innovation for several reasons. It provides balance to the comprehensive schools' dominant focus on group and cooperative effort, and introduces greater diversity into a fairly restricted secondary school curriculum. Finally, free learning allows teachers to work with students in areas other than the ones they teach, thus helping to coordinate and unify the team's work.

A third classroom activity for which teachers may be responsible is special topics. Students work six periods a week on a topic that is geared to acquaint students with the community and issues in living. Students explore new areas of knowledge and learn how to apply their academic skills to real-world enterprises. Individual study alternates with group project work. Students are sometimes organized across classes for these topics, sometimes across teams.

German teachers' daily schedules are highly varied; they do not instruct the same types or number of classes each day. Teachers have many free periods to use as they like. Tuesday afternoons are set aside for teacher meetings, at which time students are dismissed from school. Teams meet every other Tuesday afternoon. Teachers in the same subject area meet every six weeks. Department meetings are devoted to staff development; for example, the social studies faculty invited an Israeli in to talk about recent political events in Israel, and faculties often discuss research findings on new instructional strategies. A teacher in each subject area is elected to organize these conferences; he or she is relieved of one period of instruction for this purpose, but does not participate in school governance as is common with U.S. department heads. Subject area teachers at each grade level convene after the all-grade meeting to develop tests and to discuss students' performance on them. The teachers explore reasons why certain teams or classes may have performed differently and decide how to improve the work of the lower performing groups.

Instructional Features of William Penn High School

Unit and subunit structure. William Penn is presently organized into three subschools, two of which are magnet programs which draw students from across the district on the basis of scores (although these requirements are modest). A third subschool, the House of Masterminds, was developed recently to serve the general population. More than half of these students previously failed ninth grade. In response, the House of Masterminds staff devised an educational program that departs sharply from the traditional high school format. They raised standards while at the same time adopting an engaging curricular theme and individualized instruction.

The House of Masterminds is designed as a vertical house system. By 1994, it will contain grades 9 through 12 and as many as 500 students. At present, a staff of 11 teachers serves approximately 250 students in grades 9 and 10. African-American culture is used as the House's identifying curricular theme. Staff exercise some selectivity in assigning incoming ninth graders to the House: 75% of the students must have attended their middle school at least 70% of the time; but the remaining 25% of the students admitted need not meet this criterion.

A team of four teachers shares four classes of students in common at each grade level. Teams remain with the same group of students for two years. In order to limit the number of classes taught by each teacher to four, instead of the usual five, the team teaches an additional course to their students. Each team member teaches each class his/her specialty for 20 periods per week and, in addition, African-American Studies for five periods. In this way, teachers not only instruct fewer students than normal but also have more instruction time with them, an advantage this strategy has over reducing class size. While initially unenthusiastic about reducing their student load in this manner (because it entailed additional class preparation), teachers now feel having extra time with their students is helpful.

Academic program. Students take five of their six classes in the House: English, math, history, science, and African-American Studies. They take the other, an elective, with teachers outside the House. African-American Studies is taught as two half-credit humanities courses in both 9th and 10th grades. English and social studies teachers, who presently teach one course, jointly developed a curriculum that extends their regular English and social studies instruction to include African-American literature and history. They teach in a coordinated fashion such that students learn periods of African-American history in the context of literature written by African Americans during corresponding eras. Math and science teachers help students' develop social and psychological skills that foster self-esteem and positive ethnic identity.

Staff do not organize students by ability during their 9th- and 10th-grade years. A remedial math class that many ninth graders used to take was eliminated in the House and replaced with Algebra 1. After 10th grade, students who have not completed all their coursework are evaluated for promotion versus assignment to another charter or program. In practice, the only students who are not promoted into 11th grade are those who have missed an excessive amount of days.

Chapter 1-eligible students are included in each class. A Chapter 1 reading specialist serves the House of Masterminds. She collaborates with the interdisciplinary team at each grade level, providing assistance in two ways: (1) helping teachers develop strategies for improving students' reading skills in the context of core subject areas; and (2) directly assisting Chapter 1-eligible students in the classroom.

Approximately 25 students who have been assigned to the special education program are mainstreamed within the House of Masterminds; they take all of their core courses with House students. A maximum of three students are assigned to each class. A William Penn special education teacher and middle school staff select students who would be appropriate for the House, primarily students with mild to moderate disabilities, at the end of eighth grade. In this way, the students move directly into regular classes at the beginning of their 9th-grade year without first being placed in the special education program for assessment.

Instructional methods. At William Penn, staff use adaptive instruction, an individualized approach to instruction that goes hand in hand with mainstreaming special-needs students in regular classes. The strategy assumes that all students have unique strengths and weaknesses that respond better to individualized and group instruction than exclusive reliance on whole-class instruction. Teachers use a variety of methods of organizing instruction, and students assume a large degree of responsibility for initiating and managing their own work. Students work in groups and at learning centers organized around different themes or problem areas. At each center, students may elect to do a particular activity to learn a given skill or master a certain set of facts.

Teachers use a combination of traditional and innovative methods to assess student progress. In addition to taking tests, students undertake projects and assemble portfolios of their work for exhibition at year's end. At the end of each marking period (November, January, April, and June), students who have not mastered the material covered receive an "incomplete" until they have completed it successfully. Students who receive an incomplete at year's end may enter summer school to try to complete the work. In any event, they have until the beginning of their 11th grade year to complete the 9th/10th grade curriculum without receiving a failing mark. At the beginning of 11th grade, the team evaluates their academic record and decides whether they should continue in the House or enter another charter or program outside the school.

Instructional organization. From Monday through Thursday, students have a three-period block of time each morning for math/science or English/social studies instruction. This block includes a double period of one subject, with the subject changing each day. In the afternoon, when students' interest may begin to wane, they have only two periods of instruction in the two areas not covered in the morning.

Friday is devoted to seminar, which takes several different forms in accordance with students' needs and interests. Because students have already had five periods of each of their core subjects in the first four days of the week, they are free to pursue a topic of their choice in the morning and either remedial or enrichment work in the afternoon. In the morning, some teachers offer a hands-on type of activity that allows students to delve more deeply into one of their subjects. For example, the English teachers sponsor creative writing and community newspaper projects, and the social studies teachers explore African-American history topics with students. Some teachers work on social problem-solving skills with students or lead community service projects. In the afternoon, students who have not successfully completed past coursework are given materials designed to guide them through blocks of the standardized curriculum. Teachers divide the curriculum into blocks and develop a packet of materials for each so that students can make up uncompleted work in a targeted fashion.

Teachers do not have additional team planning time built into their schedules. Each team does, however, share back-to-back lunch and class preparation periods in common. They use these periods to work together on a regular basis.

Student Support

Instruction and Student Support Roles Are Integrated

Traditionally, student support functions are carried out by guidance counselors and by teachers such as deans and grade advisors who have assumed responsibility for student discipline or advisement in lieu of teaching assignments. Hence, staff who provide these services to students are seldom the ones who teach them. Under the small-unit plan, instructional team members are much better positioned to provide academic advisement as an integral part of their responsibility for students' overall progress. Each instructional team plans and implements a coordinated program of instruction for their students and, by extension, monitors their progress, provides for a smooth transition from one year to the next, and resolves behavior problems. In this way, instruction, guidance, and discipline are woven tightly together into a coherent pattern.

Integrating instruction and student support yields two other beneficial effects. Teachers who provided support services can return to the classroom full time, thereby reducing student-teacher ratios in classrooms. Guidance counselors are freed up to concentrate on student counseling, for which they are uniquely prepared. Currently, most of guidance counselors' time is taken up by student scheduling problems. Relieved of such bureaucratic demands, they are able to address students' more serious personal and family problems.

Each Teacher Serves as an Advisor to One Class of Students in His/Her Unit

To insure that no student is overlooked, each teacher serves as an exclusive advisor to one class of students within his/her instructional unit. Assigning all students in a class to one advisor facilitates scheduling time for student advisement. Teacher advisors assume ultimate responsibility for guiding and supporting their students' all-around progress. This responsibility entails collecting information about their advisee from the rest of the teaching team, maintaining advisee records, communicating with parents, identifying problems early, and coordinating the team's efforts to meet advisees' special needs.

The Day/Week Is Structured to Allow Advisors to Meet with Their Advisees

Time is set aside so that teachers can meet regularly with their advisees. Schools often have a homeroom period for school announcements and attendance-taking that can be utilized more effectively as an advisement period. Teachers may require individual sessions with students, but meetings with small groups or the whole class may sometimes be appropriate.

Guidance Counselors Work with Instructional Units

Guidance counselors work with particular instructional units to provide continuity in counseling and to coordinate their work with teachers. The traditional division of instructional and counseling functions often plays out as divisiveness between teachers and counselors: they view students through different lenses and sometimes make contradicting recommendations. Guidance counselors can help bridge this gap by consulting with teacher teams about how to respond appropriately to particular students' socioemotional problems and by sharing general strategies for managing student behavior.

Student Support at Koln-Holweide

At Koln-Holweide, one school psychologist and two social workers, one of whom is half-time, serve the 1,600 students. The very high ratio of students to guidance counselors in American schools is also found in German schools. But in Koln-Holweide the extremely high level of support that teacher teams provide reduces the need for student support staff. Moreover, guidance staff operate differently at Koln-Holweide. The school psychologist, in particular, has occasionally worked closely with the principal and assistant principals, helping to plan school governance meetings and organize staff development programs. She also holds a weekly counseling conference at which representatives of each team discuss problems with particular students and consider ways to further students' social development.

Student Support at William Penn

At William Penn, House teachers restructured the existing advisory period to accommodate more extensive advisement. Schoolwide, a 20-minute advisory period falls between second and third periods. In the House, teachers' classes are scheduled so that they have a double period of instruction with their advisory class on Mondays, immediately following the advisory period. The 10 minutes that students ordinarily use to move between second, third, and fourth period classes are added to the Monday advisory period to give teachers time to conduct individual student conferences.

Teachers use the conference to review a student's Progress Form, which identifies difficulties in any House course and the kinds of remedial actions that will be taken to address them. Remedial action may involve a teacher meeting with the student's parent or parents during the after-school conference period held one day each week. Teachers have access to a computerized student data base that is maintained by the team to facilitate advisement; each team member enters students' course performance scores and notes.

Co-Curricular Activities

Co-Curricular Activities Are Organized within Each Unit

A program of unit-level co-curricular activities advances the small-unit plan in several ways. Unit assemblies, productions, projects, field trips, and other extra-classroom activities strengthen students' sense of belonging to a separate and distinct subschool. Such activities allow students and teachers within the unit to become acquainted with one another in nonclassroom contexts and, consequently, to build multidimensional relationships. When parents are invited to participate, these activities also allow parents to interact with teachers on a broader basis that may help strengthen the rapport between them. Finally, a co-curricular program furthers student-centered instruction by dramatically increasing opportunities students have to assume an active role in the learning process.

Co-Curricular Activities at Koln-Holweide

At Koln-Holweide, students are able to participate in a variety of activities during the long lunch break. After a 20-minute lunch, students still have a full hour to mingle with students from all grade levels in arts and crafts, dancing, sports, and other activities. Parents organize some of these activities, and some teachers take responsibility for activities as part of their 24-period teaching obligation, for example, supervising the dances. Lunchtime activities not only give students a needed break, they allow students to mix with others of different ages.

Co-Curricular Activities at William Penn

At William Penn, parental activities are held on a regular basis each year. Prior to the beginning of the school year, parents and students are invited to a House orientation meeting. At the end of the first marking period in November, parents are invited to a dinner where they can talk to their children's teachers. Midway through the year parents are invited to an Open House which includes a tour of House classrooms. Parents are also encouraged to join students on field trips.

Physical Facilities

Unit Classrooms and Office Space Are Located in Adjacent Areas of the School Building

At a minimum, physical space must be allocated to each unit to allow students to take a core set of classes in one area of the building. Ideally, staff should have office space in the same area to maximize contact with students and one another. In this way, students have a home base, an area in which they can congregate and catch up with teachers. At the same time, students can travel outside the unit area to take advantage of specialized facilities for science, music, or art. Though minimal, these physical accommodations are crucial. School buildings are often so alienating that students do not even have a locker to call their own. Devoting an area of the building to a group of students satisfies basic security and social needs in a manner that supports rather than disrupts learning.

Physical Facilities at Koln-Holweide

Koln-Holweide was not architecturally designed to accommodate the small-unit system. Each team, however, has a group of adjacent classrooms in which it holds most of its classes. Students travel outside the area to classes that require special facilities, for example, science laboratory. Sandwiched between some classrooms are small rooms that give each team a place to meet and store materials in proximity to their classrooms.

Physical Facilities at William Penn

The House of Masterminds has relatively ideal physical accommodations, located on one floor that is divided into two wings by a central hallway. Each wing has two clusters of four classrooms; one instructional team occupies each cluster. Students leave the House area to attend science classes, held in laboratory space in another area of the building, and elective classes. Offices and a large work area are located in each wing. The House coordinator occupies office space in one wing. Teams meet in work space adjacent to these offices.

Unit Management

Each Unit Is Coordinated by an Instructional Leader

Each unit is headed by a teacher who functions as an instructional leader for the teachers in the unit. The instructional leader assumes responsibility for coordinating instruction within the unit so that the academic program is cohesive and the efforts of individual teachers are consistent with one another. The instructional leader facilitates the development of unifying curricular themes, projects, and courses;

identifies training needs and implements a long-range program of staff development; and provides direct assistance to instructional teams on a daily basis.

Unit Coordinators Are Members of the School Governance Body

Unit coordinators represent the interests and needs of their units on the school governance body. They help formulate school policy along with the principal, assistant principals, and subject area heads. As subschool leaders with responsibility for coordinating the entire academic program of their students, their authority is second only to that of the principal. Academic department heads are normally the only teachers with authority and a role in schoolwide decision-making. However, department heads are only responsible for instruction in particular subject areas. As a consequence, unit coordinators' authority must equal or exceed that of subject area leaders if the school is to implement a coherent, whole-student approach to education in place of one that is piecemeal. Without such authority, unit coordinators cannot maintain the integrity of their units.

Unit Management at Koln-Holweide

At Koln-Holweide, each unit is headed by a grade leader, who is relieved of six periods of instruction (one quarter of the class load) to coordinate instruction and provide representation on the school governance council. Teacher leaders from each grade level (5-13) constitute most of the members of the school governance council; coordinators of the upper school (grades 11-13), the special education mainstreaming program, and lunchtime activities, along with the school administrators, comprise the rest. The council meets each week for 30 minutes.

Unit Management at William Penn

In the House of Masterminds, the teacher coordinator is relieved of two classes to manage House activities. The House coordinator takes chief responsibility for curriculum and staff development and is a member of the principal's cabinet. Importantly, she also takes part in all major decisions that affect the creation of the school's master schedule, since it must accommodate the House schedule. Formerly, these decisions were made by the program chair, in consultation with the heads of the academic departments, and reflected the preeminence of the department structure. As charter schools have taken hold, however, the House coordinator's participation in scheduling reflects that the success of charters depends on their having at least equal standing with departments.

Normative and Political Issues Related to Restructuring

Koln-Holweide

The original impetus for the development of German comprehensive schools like Koln-Holweide was economic, but demographic and political factors also play a role in maintaining them. Germany found in the 1960s, as the United States did in the 1980s, that its traditional form of schooling did not produce enough well-educated individuals to drive its economy. Under the traditional German system of schooling, fourth-grade students are channeled into three different types of secondary schools on the basis of their academic performance; only one of these schools, the Gymnasium, prepares students for college. Comprehensive secondary schools, in contrast, were created with the mission of helping all elementary school children reach high levels of academic mastery.

The comprehensive schools comprise only about 15% of all public schools in Germany. They operate under the same regulations that other schools do, within a highly centralized and regulated system directed by federal and state ministries of education. In spite of this, these schools have managed to organize themselves in a radically different manner than other schools. In fact, in a country of declining birth rates, comprehensive schools have proven a practical alternative to closing tracked schools that are unable to draw sufficient numbers of students; in the city of Koln, gymnasiums have begun to compete with comprehensive schools for Turkish students to maintain their enrollments.

New and transfer teachers receive no additional training before they begin teaching at Koln-Holweide. However, the teacher teams provide a powerful means of introducing new team members to their methods. The stable, cohesive nature of these teams, along with regular team planning meetings, provides a high level of inservice support for new teachers. Team support is also a factor in the successful mainstreaming of special education students. Special education instructors much prefer being included in the instructional teams to teaching special classes in isolation.

Finally, the teacher professionalism and democratic style of school governance found at Koln-Holweide cultivate support for comprehensive school methods. Teachers enjoy a high level of autonomy and flexibility and have ready access to their unit leader who, in turn, exercises a good deal of authority. The school governance council provides an effective method for addressing needs and conflicts.

William Penn

In keeping with the more localized governance of U.S. schools (compared to Germany), the political and professional factors that have influenced William Penn's reforms are exclusively local. William Penn is one of 22 high schools in the School District of Philadelphia involved in schoolwide restructuring. The thrust of these reforms is to organize each high school into a collection of charter schools, each with its own staff and unique curricular focus. The restructuring initiative is fueled by a large, multiyear grant from a local private foundation. A local university professor with experience in the areas of at-risk students and race and gender issues was hired as the chief consultant.

Project funds are used in a number of ways to support the formation of charter schools. Each charter that meets district criteria receives $21,000 and two fifths of a teacher position for each charter school leader. One of these criteria specifies that charters serve heterogeneous student groups. Further, much emphasis has been placed on staff development. Teachers have numerous opportunities to attend academic-year and summer staff development sessions as teams. These combined forms of support have empowered charter coordinators with good ideas and leadership ability to organize other teachers as well as students. While the district project has created conditions conducive to increasing access to quality education, two other factors have likely played a more direct role in changing minds and practices at William Penn.

The Temple University Center for Research in Human Development and Education (CRHDE) has provided assistance to William Penn over an extended period. Staff members with expertise in classroom instruction and school organization work as a team at William Penn. The instructional specialist offers staff development on a weekly basis and during the summer in support of the goals of individualizing instruction and teaming regular and special-needs instructors. The organizational specialist participates in school-level planning geared to supporting these practices. CRHDE staff spend extensive time at the school. They have learned to respond to teachers' identified needs and to bend, rethink, and add to their own agenda while continuing to pursue their essential objectives.

Finally and most recently, the district has mandated that special education students be mainstreamed. This directive gives CRHDE's efforts more credibility within the school, and has transformed William Penn from just another school experiment into a model program that other schools seek to emulate.

CONCLUSION

William Penn High School and Koln-Holweide Comprehensive School illustrate different, yet equally effective, means of implementing small-unit structure that increase *all* students' access to quality education. William Penn staff succeeded in designing a charter school that addresses the unique needs of students from impoverished inner-city neighborhoods, students with long histories of underachievement and a severe lack of family and community support. They altered their methods of teaching instead of their expectations for those who do not readily adapt to traditional schools. William Penn demonstrates what can be achieved when district leadership is proactive, resources (both financial and human) are used efficiently, and university collaboration is a key element of the restructuring plan. Koln-Holweide evidences, in addition, the role that federal and state politics can play in promoting quality and equity in education as well as the kind of school culture that supports these goals.

Clearly, the strengths of small-unit organization can only be realized if educators design units in which students of varying backgrounds and educational histories have an equal chance to succeed. Units must not intentionally screen out or inadvertently attract certain groups of students. Teachers need to reorganize existing academic tracks and special-needs programs and adopt instructional methods that allow them to meet diverse student needs in a common context. The alternative is to replicate inadequately structured programs, continue practices that deny students equal access to quality education, and perpetuate limited educational attainment for certain groups--an alternative that cannot be tolerated either ethically or economically.

To avoid such shortcomings, educators need ready access to comprehensive information about promising reforms at both the school organization and classroom level. Other support is also needed, however. District leaders must provide expertise, incentives, and staff development funds to pursue restructuring of special-needs programs in conjunction with organizing schools into small units. State departments of education must resolve the question of what all children need to know before they leave school. In the final analysis, what is needed is a renewed commitment to the goals of a public system of education. State and federal government leaders could signal such a commitment by tackling the problems (ineffective categorical program regulations, school district funding inequities, and so on) that stand in the way of reaching these as yet unmet goals.

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Seven:

A SCHOOL-UNIVERSITY PARTNERSHIP WORKING TOWARD THE RESTRUCTURE OF AN URBAN SCHOOL AND COMMUNITY

Andrea G. Zetlin and Elaine MacLeod

INTRODUCTION

Educators, parents, and researchers alike, agree that comprehensive school reform is desperately needed in our urban elementary schools. Many of these schools are unable to achieve even a broad base of basic skills for all, with the vast majority of students scoring substantially below national norms on standardized tests (Bryk & Rollow, 1994). Such reform efforts require the professional development of the teaching and support staff as well as attention to a myriad of social ills which impinge on students' learning including dysfunctional family situations, inadequate nutrition, housing, and health care, and crime-ridden neighborhoods.

Since the mid 1960s, the majority of efforts to change and improve schools has met with widespread failure. Writing about school improvement, a number of prominent researchers have concluded that the culture of schools is highly resistant to change and unwilling to accommodate innovation (Cohen,1988; Fullan & Stiegelbauer, 1991; Sarason, 1982). Still, these improvement efforts have taught educators a great deal about implementing change in unchanging schools and classrooms (Miller, 1990). For school-wide reform efforts to be effective, those involved in the daily operations of the school must participate in the process of rethinking and restructuring the school. As Fullan and Stiegelbauer (1991) have emphasized, "systems do not change by themselves. People change systems through their actions." In addition, schools need sustained outside assistance to develop their capacity for innovation and change, and to support the major structural reforms needed to create better learning environments for students.

In the last few years, universities and urban schools have begun working together in supportive relationships with the common goal of improving education. These partnerships represent a major departure from past school and university associations which typically involved university faculty looking for sites to conduct research and/or placements for student teachers, or schools calling on university faculty as "experts" to deliver inservice workshops. In these new collaborative partnerships, teacher education, research, and school improvement have an opportunity for much greater interaction, thus increasing significantly, the potential for real reform (Pugach & Johnson, 1995).

This chapter presents a case study of the process of restructuring as embarked upon by one urban elementary school in partnership with a neighboring university. Over the course of three years, supported by funds from the Office of Educational Research and Improvement, school and university faculty, parents, and community representatives worked together to create a radically different kind of school, a school where children felt cared for and supported, social services were coordinated and developed so that students' social, physical, health and emotional needs were better met, and curriculum and instruction were coordinated and developed so that all students could achieve the highest academic standards.

The school is Murchison Street School, one of the lowest achieving schools in the Los Angeles Unified School District. The Murchison attendance area is drawn from the Ramona Gardens housing project in East Los Angeles, an area marked by deep and pervasive poverty and despair. There are approximately 1050 children attending the school from prekindergarten through 6th grade. The student body is 97% Hispanic, 2% African American, and 1% Asian American; 98% of the students are eligible for free or reduced cost lunch, 67% are eligible for Chapter 1 funding and 71% are classified as limited English proficient (LEP; Spanish is their primary language). On standardized reading achievement tests, the median percentile score for 1st through 6th graders was at the 34th percentile, with the bottom 20 percent scoring below the 7th percentile. There are 41 classes with an average class size of 28 (6 are special education classes with from 8 to 14 students); 23 teachers are bilingual in Spanish, 18 teachers instruct in English only. In addition to bilingual education, special education and Chapter 1 programs, the school offers special programs for migrant and recent immigrant students, gifted and talented students, and students at risk for dropping out.

The school staff recognized that their ongoing efforts to reform the educational program and improve students' learning was simply not enough to change the direction of the lives of their students. The principal approached the first author (who used the school as a lab site for student teachers), to serve as a catalyst for engaging teachers in a more comprehensive school restructuring effort. Other interested university faculty were recruited and the process began by conducting 20/20 Analysis of reading achievement scores to identify school needs and resources (Reynolds, Zetlin, & Wang, 1993). 20/20 Analysis of outcome data identifies students for whom the existing instructional program is working least and most adequately (those in the low 20% and top 20% of the school) and then analyzes what programmatic arrangements need to be made to enhance their learning opportunities. Reading scores were selected for analysis since literacy was a chief concern of the staff and poor reading ability was the most frequent cause for referral to special education and Chapter 1 programs.

From the 20/20 Analysis, the following specific patterns were identified:

- A disproportionate number of students in the low 20% group (those scoring below the 7th percentile in reading) were from grades 1 and 2.
- Of the total special education population, 75% fell in the low 20% group; the remaining 25% (all from the Resource Specialist Program with reading goals on their IEPS) were not included in the low 20% group and demonstrated less need for special assistance in reading than some general education students at the school site; by the same token, 55% of the low 20% group from general education were not enrolled in any program that offered highly intensive reading instruction.
- There was a high concentration of students instructed in English in the low 20% group who were not succeeding in reading and who appeared to need a strong language development program.
- Only 53% of low 20% students designated LEP received bilingual instruction compared to 86% of high 20% students.
- 29 out of 35 low 20% special education students were designated as LEP but only 4 received bilingual instruction due to lack of bilingual special education personnel.

- The absence rate was almost twice as high for low 20% as for high 20% students and especially high for lower primary grades.

- Only 15% of top 20% pupils were officially designated as GIFTED; by the same token, a number of students had been designated GIFTED, but were not included in the top 20% group because their reading scores were below the 80% cut off.

20/20 Analysis confirmed the views of many of the school staff that large numbers of students were functioning well below national norms in reading; most of the students in the low 20% group were not enrolled in special education or any other program which provided intensive remediation of academic deficits; the primary level grades were the most in need of literacy enrichment; English instructed students were the most in need of remediation; many LEP students in general and special education were not receiving adequate primary language support; and school attendance was a major problem, especially for the youngest students, underscoring the need for greater contact with parents.

Next school staff and university faculty from special education, curriculum and instruction, family studies, and counseling jointly worked out and implemented a plan of action for school reform which had three objectives:

(a) to modify curriculum and instructional practices so that classrooms featured an enriched literacy environment with adequate support for *all* students to develop literacy skills

(b) to increase the level of parent awareness of and opportunity for involvement in their children's schooling

(c) to develop an integrated services center at the school site featuring the coordination of services for children and families from County and community agencies of Health, Mental Health, Social Services and Probation.

Curriculum and Instructional Reform

A major non-categorical effort was launched to improve instruction in language and reading and involved two key areas of concentration: the primary grades (K-2nd grade) where early on students fall behind in literacy skills, and grades 3 through 6, where special and general education students and teachers could mutually benefit from supporting each others efforts.

At the primary level (K-2nd grade), four classes were reorganized into developmental classrooms where teachers worked to establish a community feeling and build trust in a risk-free environment. The classrooms featured multi-age grouping, literacy centers with a variety of reading and writing activities, and flexible grouping of students within activity centers to nurture cross-age peers assisting each others' performance. Components of the program included: (1) daily individualized conferencing in reading and writing with teacher assistants working in teams with general educators; (2) language learning activities that emphasized problem solving in real life situations of interest to the students; (3) use of materials that built on children's background knowledge; (4) thematic units featuring meaningful literacy events; and (5) children's literature infused into all reading, writing and English language (ESL) lessons.

Participating teachers (all of whom had volunteered) received ongoing in-class support from university faculty and attended weekly professional development meetings which they named WEBB (Where Everyone Becomes Better) to observe and discuss new strategies and curricula being implemented in their classrooms and to resolve problems as they arose.

In grades 3 through 6, special education students and staff were integrated into general education classrooms on a full-time or part-time basis to support team teaching (Zetlin, 1994). In the *full-time* inclusion model, two special educators and their instructional assistants served 3rd through 5th grade students labeled as having learning handicaps (LH) full-time in general classrooms and jointly planned and implemented instructional activities with general educators. In the *part-time inclusion model*, special educators teamed with general educators for two hours each morning for language arts/reading instruction and the rest of the day was devoted to intense individualized instruction for the special education students in self-contained classrooms.

In both inclusion models, a station teaching approach was adopted where teachers divided the content to be delivered and each took responsibility for part of it (Cook & Friend, 1994). By having two or three adults in the general education classrooms at any one time, each adult could work with a small group of identified and nonidentified students and provide individualized instruction to all needy students. Each team of teachers selected an instructional grouping model that best suited their particular class composition and with which they felt most comfortable (i.e.,grouping by English language proficiency, by mixed ability, or by ability). Some teachers rotated groups every 30 minutes, others preferred a daily rotation.

Monthly development meetings of both the special and general educators focused on enhancing teachers' skills of reading and writing and provided opportunities to discuss teachers' concerns such as scheduling planning time, assigning responsibility for IEP goals, planning for problematic students, and teacher expectations.

As part of curriculum reform, we addressed teachers' concerns about the seemingly small amount of reading being done at home. A series of voluntary recreational reading festivals were held to motivate students to increase their reading for pleasure. In the first festival, we targeted upper elementary students so they would become examples for the primary students. In a second festival, the primary students were targeted, and a third festival included the entire school. Students kept track of the number of minutes they read each night by having an adult family member sign their record sheets. These amounts were recorded during lunch time at a designated area on campus manned by parent volunteers. Every few days the total hours and minutes were computed for all participants and posted on large signs throughout the school. School wide totals of over 517 hours of pleasure reading for the first festival, over 400 total hours for the primary students' festival and over 929 hours for the K-6th grade festival were celebrated in school assemblies and after school culmination parties which were decorated and "catered" by parent volunteers.

Parent Opportunities

A parent center was established as a bridge between parents and the school and to facilitate empowerment within the larger community (Zetlin, Campbell, Lujan & Lujan, 1994). The parents elected a parent to be coordinator, and the coordinator worked with school and university faculty to organize center-sponsored activities. The activities included: a "welcoming place" for parents to congregate informally with other parents and school staff to discuss concerns (i.e. school and personal worries) in a nonthreatening atmosphere; weekly morning and monthly evening meetings (for working parents) to discuss topical issues concerning school and community matters; opportunities to become actively involved in school business, to assist in the development of instructional materials for classroom use, and to sponsor grade-level and school-wide events; and a resource center for providing needed information on coping with life in the inner city, such as referrals for emergency food, housing, and medical services. As needs became known, the Center also arranged for: English Language classes, a mentor parent leadership training program, a weekly family history group where parents told their stories (which were tape recorded, then transcribed and turned into books to be shared in classrooms), and a "Baby and Me" class for parents and their toddlers to socialize and for parents to discuss their needs, questions and parenting concerns with an early childhood educator.

Integrated Services

The staff recognized that for students to succeed, the school needed to attend to the whole child and eliminate or minimize barriers to learning. Enabling services such as medical, dental, and counseling were as necessary as good instruction if they were to improve student outcomes. This led to an outreach by the school to County departments of health, mental health, and social services to better coordinate services and make these services more accessible to students and their families. A year of planning and meetings resulted in the development of a school based integrated services center which offers a variety of health and social services to students and their families (Zetlin & Bilovsky, 1992; Zetlin, Ramos, & Valdez, 1994).

The Center is based on a "spoke" collaboration model in which the Center is the primary agency, the "hub," linked with other agencies, the "spokes," on a collaborative basis to meet specific needs. Students and families are referred to the Center by teachers, other school staff (e.g., school social worker, school nurse) or by parents. A case manager is assigned and a family plan is developed. On site services such as short term counseling and limited health care (immunizations, screenings, prescriptions) are available at the Center site. Resource and referral services are also available through case management (i.e., dental and eye care, substance abuse detoxification programs, short term housing, emergency food supplies). By collaborating with other agencies, the Center is better able to meet the comprehensive needs of the students and their families, with all involved working toward the shared goal of improving children's prospects for success in school.

Outcome Data

Although it is still early to see the full impact of the reform effort on student achievement, the most recent achievement data do show gains of a few percentile points in the desired direction. More impressive have been gains in student attendance. Over the past three years, students have gone from an average of 1.4 absences per month to .95 absences per month. The increase in attendance is especially notable during November and December, months in which students in previous years, left school to visit family in Mexico. Gains are also evident in the number of students with perfect attendance, up from 60 three years ago to over 250 last year.

Parent involvement at all levels of school business is another area of significant improvement. Before active efforts to reach out to parents, parents could be seen walking children to school each morning and escorting them home at the end of the school day. Few ventured through the front doors and then just to attend parent teacher conferences or Open House. Parents now actively participate on School Leadership and Parent Advisory Councils, attend meetings and parent programs, volunteer in classrooms and on the school yard during recess and lunch periods, and attend school-wide events in such substantial numbers that special assemblies have to be repeated three times to accommodate the swelling numbers. Family members also attend counseling sessions with greater regularity. Department of Mental Health reported a 90% attendance rate for appointments scheduled at the school-based center compared to a general 50% attendance rate at the County clinic.

Participating teachers within the upper and lower grades have begun to work as teams. They are no longer isolated from each other and collectively assume responsibility for students' learning and academic restructuring. Observational and self-report data of teachers indicate that they are using more constructivistic practices and providing students with more opportunities for developing literacy. The structural and organizational changes that have occurred in their classrooms have enabled these teachers to establish the "professional norms of a learning community" (Bryk & Rollow, 1994). Their enthusiasm as they see growth in students' reading and writing skills as well as their teaching skills, has spread to other teachers at the school who have indicated interest in joining the teams and making changes in their classrooms. Most recently, school faculty and parents elected to participate in the school district's major restructuring plan which includes site-based management, shared decision-making, and greater fiscal autonomy at the site level.

DISCUSSION

The collaborative work of the school and university has resulted in a comprehensive redevelopment effort which considered the full range of issues and concerns of an urban school. Essential to the partnership was the sense of parity and mutual participation of both institutions. The technical expertise of the university and the practical understandings of the local educators were equally valued. The university served as a catalyst for change and a source of guidance to the school staff, and together, the school and university actively participated in the conceptualization and implementation of the change effort. The ongoing social interaction between these two institutions focusing on an immediate and real-life problem (i.e., the restructure of an urban school) served to build trust and mutual respect and enabled their differences to become strengths. The total effort, which is still evolving, embraces the support and participation of university faculty, teachers, administrators, parents, and community agency personnel, all working as a team to improve urban schooling and to enhance the outcomes for students at risk for school failure.

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Eight:

THE CHANGING POLITICS OF FEDERAL EDUCATION POLICY AND RESOURCE ALLOCATION

Kenneth K. Wong

INTRODUCTION

Since the mid-1960s, the federal government has used categorical programs as the primary tools to address equity issues in elementary and secondary education. Categorical programs have clearly focused on social equity issues by promoting racial integration, protecting the educational rights of the handicapped, funding compensatory education, and assisting those with limited English proficiency (Peterson, Rabe, & Wong, 1986). These "redistributive" programs allocate resources to address inequities that primarily arise from class, status, and racial cleavages (Lowi, 1964; Ripley & Franklin, 1984).

Categorical programs have survived partisan shifts in national governmental institutions. For almost thirty years, the federal government has spent billions of dollars in redistributive educational programs. In 1991, the federal government allocated $6.2 billion to compensatory education, $ 2.4 billion to special education, and $200 million to bilingual projects. The Chapter 1 (compensatory) programs, for example, are providing services to over five million disadvantaged pupils in prekindergarten through grade 12. Between 1965 and 1992, the federal government disbursed over $80 billion to compensatory education.

To be sure, federal funding for educational programs has fluctuated over time. Between 1965 and 1980, federal aid to elementary and secondary schools has shown persistent growth in real dollars. However, federal support for elementary and secondary education declined during the Reagan years, dropping in constant dollars by 17% between 1980 and 1989. Toward the mid and late 1980s, however, major categorical programs began to receive more federal support. As we approach the mid-1990s, the Clinton administration is likely to rely heavily on continued support of existing categorical programs in addressing educational inequity.

An Institutional Perspective on Resource Allocation

Given the importance of the federal role, researchers have examined the politics that centers on the allocation of federal aid. Federal categorical programs in education, in my view, involve decisions in resource allocation in three distinct but interrelated phases. In this chapter, I argue that the three decisional phases can be differentiated by the key actors involved, the institutional location within which resource allocation takes place, and the politics that emerges.

More specifically, federal categorical programs involve resource allocation at three different levels of the policymaking system, each of which focuses on a distinct set of policy and political issues. First, in the national legislative process, which features prominently both the President and Congress, national policy objectives are determined and federal funds are appropriated to states and localities to implement federal programs. National educational policy is clearly embedded in the political dynamics between the legislative and executive branches. Second, in receiving federal aid, state and local educational agencies play a pivotal role in carrying out national policy objectives. Policy implementation in our federal system is far from straightforward. Instead, intergovernmental politics define the use of federal aid at the state and district levels. Whether local administrative agencies are in compliance with federal fiscal regulations has been an important topic. At issue is whether federal resources are targeted on the intended beneficiaries. Third, at the school and the classroom levels, federal resources are likely to shape curricular and instructional organization. Policy analysts are paying particular attention to curricular fragmentation and the separation of special-needs students from their peers in regular classrooms.

Indeed, our focus on the three kinds of resource allocation in federal programs is indicative of a broadened research agenda. Over the years, researchers and policymakers have developed an increasingly comprehensive and realistic understanding of the role of the federal categorical programs in addressing educational inequities. There has been a gradual shift of attention from the national level to the institutional setting at the micro level. During the mid and late 1960s, in the initial period of federal categorical involvement, much attention was focused on the allocative formula that disbursed federal aid according to a count of students in poverty on a state-by-state and country-by-country basis. During the 1970s, the federal government became more concerned about implementation--making sure that local agencies complied with federal targeting guidelines. Since the late 1980s, the federal government has paid greater attention to the impact of categorical funding on classroom organization and student learning.

A broadened scope of inquiry notwithstanding, researchers are not always in agreement on matters of resource allocation. Disagreement is clearly due in part to analytical perspectives that are often time bound and context specific. As I shall discuss later in this chapter, the roles of Congress and the President in the legislative process were reversed between the 1960s and the 1980s with respect to federal involvement in education. On policy implementation, the earlier view on conflictual federal-local relations is gradually being replaced by an emphasis on intergovernmental accommodations. On resource allocation within the school, the earlier concern about administration compliance is now overshadowed by serious debate that centers on fragmentation in the school curriculum and especially on the need for integrating programs for children with special needs with the program in the regular core curriculum.

In this chapter I shall synthesize the literature on politics and policy in each of the three kinds of resource allocation. First, I examine the changing legislative politics in the federal role to promote a redistributive policy in education to remedy social inequities. Second, I shall specify the political and institutional factors that have facilitated administrative compliance from districts and states. Third, I review recent federal efforts to promote learning among disadvantaged students. In the concluding section, I explore briefly the implications of this analysis for policy and research.

The Politics of Educational Equity at The Federal Level

Federal Redistributive Role

The literature on federalism has provided a number of reasons why a redistribution of funds to address social inequities is more likely to come from the national government. The federal government enjoys a broader revenue base in which taxes are raised on the ability-to-pay principle, and it represents a constituency with heterogeneous demands (Peterson, 1981; Reagan & Sanzone, 1981; Tiebout, 1956; Wong, 1990). In other words, it has both the fiscal capacity and the political resources (often facilitated by interest groups) to respond to social needs. In contrast, localities are more restrained in responding to social needs because their most active voters come from the middle class. Local communities have to compete with one another for investment in an open system where business and labor can move freely. Unlike the federal government, local governments have a restricted tax base (namely, property values) as their major source of income. Compared to local governments, states are somewhat more likely to provide redistributive services because they enjoy a broader tax base, they command a larger pool of resources and they encompass a bigger geographical boundary that tends to reduce the threat of a decreased tax base resulting from an out-migration of residents who would rather leave the state than pay taxes for social programs that do not directly address their own needs.

Given the importance of the federal role, researchers have studied the politics that centers on social-equity issues. Two bodies of literature are prominent; one focuses on the legislative process and the other looks at presidential leadership. Based on a synthesis of these studies of the national institutions, I shall argue that we have revised our earlier understanding of the role of the national government in education.

Presidential Activism

Numerous studies have focused on the dynamics of presidential leadership and congressional power in shaping educational policy (Cavanagh & Sundquist, 1985; Lowi, 1964; Munger & Fenno, 1962; Orfield, 1978; Ripley and Franklin, 1984; Sundquist, 1968). A good example is the passage of a compensatory education program--Title I of the 1965 Elementary and Secondary Education Act (ESEA). This legislation significantly expanded federal involvement in public education. It offered an opportunity for analysts to appreciate the ways in which groups and actors with different interests and priorities can form legislative coalitions to overcome institutional obstacles. For years, action on this bill was deadlocked over budgetary considerations, concerns over federal aid to segregated schools and to parochial schools, and issues of local autonomy. These barriers were reinforced by the authority structure of congress--a committee system allowed a powerful few working behind closed doors to effectively kill a bill, and the seniority practice preserved the privileges of the committee chairs at the expense of voting rights of the entire legislative body (Sundquist, 1968).

Institutional barriers were finally overcome in 1965. The legislative victory was the result of a combination of political factors. Congressional leaders overcame the concern about separation of church and state by agreeing to provide aid directly to students instead of schools. There was a clear public mandate in support of a more "activist" federal government following the passage of the 1964 Civil Rights Act. The 1964 election produced a new cohort of liberal lawmakers who formed the rank and file of an emerging liberal majority in Congress. But above all, the legislative success was due to presidential leadership. President Lyndon Johnson was fully behind the bill and saw compensatory education as a major strategy in his newly declared "War on Poverty."

Institutional Safeguards

The roles of the Presidency and the Congress were in large part reversed during the 1970s and the 1980s. Whereas studies identified institutional obstacles in Congress that blocked activist agenda submitted by the executive branch during the 1950s and the early 1960s, analysts in the 1970s and 1980s found that congressional safeguards were used against an administration that wanted to cut back on school and other social programs. The role reversal was in large part facilitated by divided governance throughout the 1970s and the 1980s--the Republican Party virtually secured its hold in the Presidency and the Democratic Party dominated the Congress (Cavanagh & Sundquist, 1985; Mayhew, 1974). In other words, Republican administrations have made numerous attempts to contain the federal social role. Yet even when the President claimed public mandates to reduce federal involvement in domestic programs, as in the case of Nixon's first term and the Reagan years, the Democratic-controlled Congress was able to exercise enormous restraints (Orfield, 1978; Peterson, Rabe, & Wong, 1968).

A closer look at the institutional safeguards suggests that they come from diverse sources. First, legislative restraints are rooted in the division of labor in Congress, incumbency power, and seniority privileges. For example, members of Congress who supported the passage of ESEA in 1965 subsequently held leadership positions with long tenure in the 1970s and 1980s.

Second, the educational bureaucracy has come to identify with the interest of its clients and has become an advocate for special-needs programs (Lowi, 1979). A dynamic example is provided in the conflict between the career legal professionals and the politically appointed Attorney General in the Justice Department over school desegregation policy during the first year of the Nixon Administration. In August 1969, when the administration stopped the practice of cutting off funds if schools were not promoting racial integration, nine out of ten of the attorneys in the Civil Rights Division protested the White House strategy (Orfield, 1978).

Third, over time, federal programs are preserved by a fairly stable bipartisan coalition of top bureaucrats, key members of the Congress, and prominent interest groups (Anton, 1989). Major educational programs for the needy have received bipartisan support due in part to growing public concerns for investment in human capital. Indeed, over the years public support for the Head Start program for preschoolers and compensatory education has broadened. Just as important is the territorial impact of federal categorical grants. In 1990, the Chapter 1 program provided supplemental resources to 64% of all of the schools in the nation (Millsap et al., 1992). Clearly, big districts are not the only beneficiaries of compensatory education funds--over 20% of the federal aid goes to districts with fewer than 2,500 students. Districts with enrollments between 2,500 and 25,000 received almost 45% of the funds. Because there are Chapter 1 programs in every single congressional district, partisan conflict has been generally limited during the appropriations process (Peterson, Rabe, & Wong, 1986, pp. 110-112).

Finally, judicial decisions cumulate in a legal framework that offers legitimacy for the national government to play a role in redressing educational inequities. Although the U.S. Supreme Court rejected federal involvement in school finance in *San Antonio Independent School District v. Rodriguez* (411 U.S. 1[1973]), it justified national leadership in racial desegregation, civil rights, gender equity, and equal educational opportunities. Even with opposition from the Nixon administration, the Supreme Court actively pursued a desegregation in the South during the late 1960s and early 1970s. Consequently, between 1968 and 1972, racial segregation in Southern schools declined sharply--the percentage of blacks in schools with more than 90% minority enrollment decreased from 78 to 25% (Orfield, 1988). However, with prevailing conservative mood during the Reagan years, the Supreme Court seemed ready to become less of a social agent.

Institutional safeguards clearly have policy consequences. Even in the period of federal fiscal retrenchment during the 1980s, the socially redistributive character of federal grants to states and localities had been largely preserved. During the fiscal year 1984, in the midst of the Reagan retrenchment, the appropriate process in Congress made sure that over half of all the 142 federal formula grants remained targeted to those programs serving groups whose incomes fell below the poverty line. In education, training, and employment related services, over 80% of the federal funds went to special needs groups (Wong, 1989). Opposition from Congress and various interest groups resulted in the failure of the Reagan administration to deliver its campaign promise of dismantling the U.S. Department of Education, which would have substantially reduced the federal role in encouraging education equity. Instead, compensatory education received more funds in the 1980s than it had in the 1970s: its focus on low-achieving students living in impoverished communities was retained, its administration remained with state and local programs, and its allocative practices were not replaced by a voucher arrangement (see Peterson, Rabe, & Wong, 1986). In the early 1990s, the largest federal educational program, Chapter 1, continued to distribute resources to districts with the greatest needs. Districts with the highest concentration of children living in poverty (i.e., at least 21% of the enrollment is poor) receive 45% of the total federal Chapter 1 funds, even though they enroll only one-fourth of the nation's public school students. Conversely, districts with the lowest concentration of poor students (i.e., fewer than 72% of the districts students are poor) receive only 11% of Chapter 1 aid, although they educate 27% of the nation's public school students (Millsap et al., 1992).

Impact of the New Federalism

Although the federal role in educational equity remains largely unchanged, the Reagan administration succeeded in terminating several categorical programs, reducing funding levels in others, and consolidating many categorical programs into broadly defined block grants (Clark & Astuto, 1986). Indeed, when institutional safeguards are weak, programs can actually be eliminated.

Termination of the Emergency School Aid Act (ESAA), Title VI of which provided for desegregation programs, provides a good example of how a federal policy failed to receive either bureaucratic advocacy or bipartisan support during the Reagan years. By eliminating ESAA, the Reagan administration substantially trimmed federal fiscal support for racial integration purposes. It took four years for the federal government to enact another categorical program on racial desegregation. The magnet schools Assistance Program that started in 1985 became the only major program that supported racial integration in urban districts. Funding for this highly competitive grant program remained around $75 million during the Reagan years, but increased to $114 million for fiscal 1989. These grants, however, are not specifically for big urban districts. According to a study of the General Accounting Office, while four of the eleven largest school districts in the South and the West applied for a grant in 1985, only one received funding. In 1987, eight of these districts applied for a grant, but only three received funding (U.S. General Accounting Office, 1987).

Another major impact of the Reagan administration was the decentralization of decision making on federal aid (Knapp & Cooperstein, 1986). However, when states are given the responsibility for making decisions about resource allocation, they are less likely to focus on redistributive issues. At the state and local level, "policy generalists" and their constituencies tend to dominate in the decision-making process. Generalists include elected officials (e.g., state legislators) as well as top appointees in education agencies. A good example of how federal dollars can be diverted away from redistributive needs is the block grant created under Chapter 2 of the Education Consolidation and Improvement Act. The block grant consolidated twenty-eight categorical programs (including the ESAA desegregation program) and shifted allocative authority to the states. State control has weakened the redistributive focus of the antecedent programs. In their fifty-state analysis of the allocation of block grant funds, Martin Orland and Staffan Tillander (1987) found that seventeen of the twenty-six largest urban districts received fewer funds than in the immediately preceding block grant year. Virtually all the losers received a significant amount of ESAA funds before the consolidation. More important, 80% of the states distribute most of the federal aid without any regard to any special needs criteria. Only two states targeted the block grant at districts with high needs factors. In other words, devolution of federal aid has resulted in lower governmental support for educational equity.

The Reagan administration also failed in several attempts to promote a nationwide voucher policy for Chapter 1 participants. Indeed the administration tried three times to convert the federal compensatory categorical program into a voucher program. The most serious proposal was the Equity Choice Act (H. R. 3821) in November 1985, also known as "TEACH", which would have allowed Chapter 1 students, at their parents' request, to attend any schools in the district. No funding increase was proposed for Chapter 1's conversion. None of the Reagan proposals was seriously considered by the Congress, particularly after the 1986 election when the Republican Party lost its six-year majority in the Senate.

Overall, the impact of the Reagan administration is uneven among policy domains. Although Congress succeeded in preserving most of the major educational programs, the Reagan administration was able to reduce support in low-income housing and other social policy areas. Consequently, the federal grants-in-aid in the late 1980s have returned to the level of the early 1960s when measured as a percentage of the gross national product.

District Compliance With Federal Categorical Policy

Implementation studies focus on how federal resources are actually used in the school district. This literature offers two very distinct perspectives on the administrative effectiveness of federally funded programs. In particular, these studies focus on whether federal resources are targeted to the intended beneficiaries. In other words, a key research question is, Are districts and state agencies in compliance with federal auditing and administrative requirements? In this section, I shall summarize how over the years we have raised our understanding of policy implementation in the intergovernmental system.

Intergovernmental Conflict

The first set of evaluation studies (or the first-generation studies) came out in the 1970s and covered a wide range of policy topics--from compensatory education and busing programs to achieving integration of job training and employment programs in economically depressed communities. The studies were highly critical of the ways federal programs operated. In reviewing the highly complex intergovernmental administrative structure of such programs, analysts often found confusion, conflict, and failure to complete national social objectives (Coleman et al., 1975; Hill, 1977; Kirp & Jensen, 1985; Murphy, 1971; Pressman & Wildavsky, 1973). In other words, federal resources set aside for goals of remedying social inequities seldom got into the hands of the intended beneficiaries.

The earlier studies have no doubt raised important political and policy issues--whether federal regulations provide the best way to achieve national social objectives, and whether the federal government could overcome obstacles at the subnational level to improve services for the intended beneficiaries. At the same time, these studies have several methodological shortcomings. They are predominately single-case studies, often focused on the first couple of years when the program had just started (and conceivably the period of greatest implementation problems), and they did not distinguish the programs that addressed social inequity from those that did not.

Toward Accommodation

The recent (or "second-generation") implementation studies tend to overcome these methodological shortcomings. First, these studies differentiate the social-equity objectives from other purposes in federal programs. Having made explicit the differences in national purposes, the second-generation studies consider intergovernmental conflict as a function of redistribution of funds to achieve social-equity goals (Jung & Kirst, 1986; Odden & Marsh, 1989; Orfield, 1969; Peterson, Rabe, & Wong, 1986; Singer & Butler, 1987).

Programs that address the disadvantaged often require local governments to reformulate the way services are delivered. Because revenues in these programs come mostly from the U.S. Congress, the federal government tends to impose numerous and complicated standards on local schools. These regulations are intended to ensure that disadvantaged pupils directly benefit from federal dollars. In compensatory education, for example, local districts are required to use federal funds in schools with the highest concentration of students in poverty, to spend many local dollars on these schools as on any other school in the district, and to commit at least the same level of local resources as they provided in previous years. In special education, the federal provisions in the Education for All Handicapped Children Act (PL 94-142) give service recipients an official policymaking voice within the service-delivery system. The IEP (individualized education plan) provision is designed to allow as much parental participation as possible in making evaluation and placement decisions about service for their handicapped children. During the 1970s and the early 1980s, the compensatory education program required the formation of advisory councils composed of parents of children participating in the program.

As expected, there is local opposition to federal targeting on the special-needs populations. In a comparative study of four major federal education programs in four districts, Paul Peterson, Barry Rabe, and I (1986) found that local districts were tempted, to greater or lesser extent, to divert funds away from these redistributive programs to other purposes. Compensatory education funds, for example, were used for generating operating purposes that tended to benefit the entire school population. Implementation difficulties were also found in special education. However, programs such as vocational education and ESEA Title IVB that were not primarily redistributive in focus showed minimal conflict, or even cooperation, between levels of the government.

Second, even when they conduct a single case study, the second-generation researchers adopt a longitudinal view. Policy analysts often collect information from multiple years during the implementation process, thereby enabling them to denote cycles of political compromise and programmatic accommodation in the complex intergovernmental system.

With the passage of time, a tendency toward increasing intergovernmental accommodation seems to have emerged in social-equity policy. The compensatory education program, for example, has evolved through three distinct phases (Kirst & Yung, 1982; Peterson, Rabe, & Wong, 1986). Originally it was little more than general federal school aid, with virtually no stipulations attached to the use of funds. Extensive local misuses of these resources prompted the federal government to develop tighter regulations. Most notably, a study conducted by the NAACP Legal Defense Fund during the first program years found that federal funds were being used for "general school purposes; to initiate systemwide programs; to buy books and supplies for all school children in the system; to pay general overhead and operating expenses; [and] to meet new teacher contracts which call for higher salaries" (Martin and McClure, 1969). Consequently, throughout the 1970s, the program had acquired such an exceedingly well-defined set of rules and guidelines that many state and local officials had difficulty in putting them in place. Intergovernmental conflict seemed to have tempered by the late 1970s and early 1980s, when federal, state, and local administrations worked out their differences.

This transformation from institutional conflict to accommodation has been facilitated by several factors. At the district and school level, a new professional cadre closely identified with program objectives were recruited to administer special programs, and local officials became more sensitive to federal expectations. At the federal level, policymakers began to see that detailed regulations, tight audits, and comprehensive evaluations were mixed blessings. With the state agency serving as an active mediator, appropriate changes and adjustments were made. Over time, administrators developed program identifications that transcended governmental boundaries, and a commitment to a coordinated effort gradually emerged.

The pace of moving toward federal-local cooperation in the management of special programs is not uniform--there are significant variations among districts (see McLaughlin, 1990). This leads to the third methodological characteristic of the second-generation studies--the use of comparative cases that involve multiple schools, districts, and/or states. Researchers are able to specify the sources of local compliance and resistance by taking into consideration any variation in the local context.

District-level contextual variables are seen as relevant. I (Wong, 1990) found that local reform in redistributive services depends on the district's fiscal conditions, on the political culture, and on the autonomy of the program professionals in policymaking. More severe and prolonged conflict is likely to be found in districts with a weak fiscal capacity and a program apparatus that is subject to strong political (machine-style) influence. A combination of these fiscal and political circumstances hinders local reform toward redistributive goals. In Baltimore, a 1978 federal audit faulted the local administration for the misuse of almost $15 million. Since the city's mayoral office had direct access to the Title 1 account, it was likely that federal funds were at times used for patronage employment. During fiscal year 1976, for example, the district used the federal funds to hire employees whose duties were "handling requisitions for repair equipment, preparing reports on the state-funded driver education program, coordinating printing for the entire district, and budgeting control on personnel position and payroll authorization for the entire system" (Wong, 1990, p. 135).

At the other end of the continuum is a district with strong fiscal capacity, autonomous program professionals, and, most of all, teacher commitment to policy objectives. (On linking site-level variables to the design of macro policy, see Elmore, 1980; McLaughlin, 1987; McLaughlin & Berman, 1978). In these circumstances, one expects to find rapid transformation from the conflictual to the accommodative phase in special-needs programs. This institutional process of adaption (e.g., targeting resources to those who are eligible to receive them) is a necessary condition for instructional and academic improvement in disadvantaged schools.

Allocation of Federal Resources to Promote Classroom Learning

Beyond Administrative Compliance

Fiscal accountability is clearly becoming less of a problem than classroom issues. Based on a national survey of Chapter 1 district-level coordinators in 1990, a major evaluation study (Millsap et al., 1992) found that federal requirements on funding compliance--supplementing (not supplanting) existing services, maintenance of efforts, and comparability provisions--are all ranked as far less burdensome than procedures that affect instructional practices. Indeed evaluation procedures, needs assessment, and student selection are viewed as the three most burdensome federal regulations that govern Chapter 1 (Millsap et al., 1992). For example, very few districts develop reliable procedures for assessing the educational needs of students who remain in compensatory education for more than two years (Millsap et al., 1992, pp. 2-44).

As local noncompliance over funding use increasingly became less of a problem, the federal government and local school professionals began to look for ways to improve program effectiveness. Recent federal and local reform efforts are directed at issues that would forge a better linkage between community setting and instructional strategies in compensatory education.

Addressing "Concentration Effects"

The first issue is related to the "concentration effects" of disadvantaged students in poor neighborhoods (Wilson, 1987). According to the National Assessment of Chapter 1, educational performance is just as adversely affected by living in a low-income neighborhood as by coming from a poor family. As the report pointed out, "[S]tudents were increasingly likely to fall behind grade levels as their families experienced longer spells of poverty, and the achievement scores of all students--not just poor students--declined as the proportion of poor students in a school increases" (Kennedy, Jung, & Orland, 1986, p. 107). In other words, if both factors are combined (i.e., if a child comes from a poor family and lives in an impoverished neighborhood) the incidence of educational disadvantage (e.g., doing poorly on tests, failure to move on to the next grade level) is approximately twice as high when neither factor is present. Similarly, a 1992 General Accounting Office report found that schools with a high concentration of children living poverty "have disproportionately more lower achievers than schools with fewer children in poverty" (U.S. General Accounting Office, 1992b).

Clearly, compensatory education is especially needed in those neighborhoods where the incidence of poverty is very high. However, resources intended for the needy students became diffused in the multilayered system of school policy. Schools with over 25% of their students from low-income families are eligible for Chapter 1 aid. Consequently, federal Chapter 1 funds are distributed to 64% of the nation's public schools instead of concentrating on the schools with the highest proportion of disadvantaged pupils. At the school level, the principal and teachers enjoy discretion in student selection. While most of the students receiving Chapter 1 reading services are either low-income or low achievers, a number of them do not fall in the disadvantaged categories. Indeed, according to the National Assessment Report, almost 10% of the program participants are nonpoor who achieved above-average performance (Kennedy, Jung, & Orland, 1986). Because of the diffuse resource allocation pattern, the National Assessment estimated that as high as 60% of students eligible for receiving Chapter 1 services remained unserved in the poor community.

While the Congress has become increasingly aware of the "concentration effects," it remains to be seen whether the federal government will move to allocate significantly more resources to the neediest schools. Though short of allocating additional resources to the neediest schools, Congress enacted the Hawkins-Stafford Amendments in 1988 that allow for a schoolwide project in schools where at least 75% of their students come from families whose incomes fall below the poverty line. The new flexibility seems to have encouraged schoolwide projects, which increased from 621 in 1989 to 1,362 in 1990 (Millsap et al., 1992). Schools with many children from poor families are permitted to use federal Chapter 1 funds to reduce class size, develop staff training, support parent involvement, and recruit new professional support personnel. Equally important is that schoolwide projects have, in some cases, contributed to instructional innovation. For example, in a 1990 survey of district coordinators, over 50% of the respondents reported that schoolwide projects strengthened parent education programs and helped to change practices in student placement in reading and mathematics classes so as to have more heterogeneous student groups.

Strategies to Reduce Classroom Fragmentation

The second issue taken up by federal policymakers relates to improving curricular and instructional coordination within the classroom, which thereby facilitates higher performance among participants in the Chapter 1 program. Fragmentation is nothing new and it has very little to do with meeting the educational needs of the disadvantaged pupils. Schools that receive Chapter 1 funding often "pull out" the program participants for special instructional purposes as a way to meet the accounting requirements. A 1983 survey of district-level program coordinators found that 73% of the respondents used pull-outs mainly to comply with auditing regulations, and "only 18% of district administrators who used the pull-out design indicated they believed it was educationally superior to any other mode of delivery" (Smith, 1988, p. 130).

In the context of increasing public concerns about competitiveness and reform, policymakers and local school professionals are beginning to shift their focus from administrative compliance to program effectiveness. Indeed, as Michael Kirst observed, the publication of *A Nation at Risk* in 1983 renewed concerns for blending Chapter 1 with a core academic curriculum (Kirst, 1988, p. 110). There is now a call to redesign programs at the school level in ways that will strengthen the school's overall organizational capacity to develop more comprehensive (instead of fragmentary) strategies for helping the disadvantaged (See Chapter 4 in this volume.).

As we know more about the learning pattern among disadvantaged students in Chapter 1 programs, there is a heightened concern for better coordination at the classroom level. Evaluation studies have shown that Chapter 1 participants make greater progress in mathematics than in reading. Participants in the later grades generally made slower progress than their peers in the earlier grades (see Heid, 1991). To enhance program quality, Congress passed in 1988 the Hawkins-Stafford Elementary and Secondary School Improvement Amendments. Chapter 1, which in addition to allowing schoolwide projects in schools with a high concentration of children in poverty, required an instructional program and encouraged parental involvement.

To promote these reforms, each state was given a modest grant of $90,000, which on average amounted to a grant of only $2,000 per district to districts with a large concentration of children in poverty. While the effects of these federal initiatives remained uncertain in the short run (Herrington & Orland, 1992), some schools already showed positive results (de Baca et al., 1991).

Several national trends on classroom organization seem to have emerged following the implementation of the Hawkins-Stafford Amendments. First, an increasing number of Chapter 1 schools are beginning to combine pull-out programs with in-class strategies, although the latter remain by far the most popular instructional arrangements. Between 1985 and 1990, one study found that "there has been an almost 50% increase in the number of districts offering in-class instruction" (Millsap et al., 1992). Another study reported that several districts have adopted computer-assisted instruction (Stringfield, Biling, & Davis, 1991).

Second, while stationwide projects have been more popular in schools that have many students living in poverty, as discussed above, coordination between Chapter 1 and the regular curriculum remains a challenge in most Chapter 1 schools. In most schools, coordination relies mostly on informal meetings, and staff planning sessions rarely occur. Third, the recent federal reform effort has facilitated district activities to promote parental involvement. Between 1987 and 1990, more districts reported "disseminating home-based education activities to reinforce classroom instruction," and using liaison staff to coordinate parent activities (Millsap et al., 1992). Finally, local districts remain largely uncertain with regard to student needs assessment and program evaluation, areas where federal and state agencies can provide crucial technical assistance. Overall, given the climate of programmatic reform, local professionals are directing greater attention to instructional issues, such as whether pull-out practices are educationally sound (Slavin et al., 1989). In short, the federal categorical role seems to have moved from excessive regulatory oversight in the 1970s to facilitating instructional effectiveness in the late 1980s and early 1990s.

CONCLUSION: POLICY IMPLICATIONS

The federal government has relied primarily on categorical programs to address educational inequities. Given our multilayered policymaking system in education, we have identified three phases in the allocation of federal categorical aid. This more differentiated understanding offers a useful way to analyze resource allocation, because each level involves different actors, issues, and politics. Legislative politics is clearly embedded in the partisan and institutional interplay between the Congress and the presidency. Policy administration is substantially shaped by professionalism, fiscal capacity, and other institutional factors at the resources are likely to affect how teachers organize the curriculum and the instructional strategies they use. Over the years, our understanding of the federal categorical role has been broadened to include policy issues at both the macro (district) and the micro (school, classroom, and instructional group levels).

As we enter the last decade of the twentieth century, categorical programs as a federal redistributive policy tool seem far more secure than when they began thirty years ago. With broadened public support for education and a unified national government controlled by the Democratic Party, the Clinton administration is likely to expand the federal categorical role in federal funding for Head Start, Chapter 1, bilingual education, and programs for the handicapped.

A major challenge for the federal policymakers is to decide where to allocate resources that would bring about better life chances for the disadvantaged. Recent literature suggests two areas for additional federal funding. First, additional funds should be allocated to deal with the "concentration effects" in inner-city schools. Clearly, the ecological context of urban schools has changed significantly since the enactment of the original legislation for compensatory education (ESEA Title I) in 1965. At that time, the nation had extensive rural poverty, its central cities were economically stable, and suburbs were emerging as viable communities. By the 1990s, we see a widening education gap between the central city and its surrounding suburbs. This is especially evident in major metropolitan areas, where most students in schools in outlying suburban communities are white and most students in schools in the central cities are minority and from low-income families. In 1990, while minority groups made up over 60% of the central-city school enrollment, whites accounted for almost 80% of the suburban school population in major metropolitan areas. In the metropolitan Chicago area, a typical Chicago public school has 73% of its students classified as low-income, as compared to only 12% in suburban schools (Scheirer, 1989).

As a 1985 report on metropolitan Milwaukee concluded, "[Our] study revealed two very different worlds of educational achievement; worlds separated by but a few miles, yet by much greater distances in terms of acquired skills, institutional success, and future prospects" (Witte & Walsh, 1985). Similarly, Gary Orfield and Sean Reardon (1992) observed "a structure of educational opportunity that is highly stratified at every level by both race and class" and by residential choices. They found that students in central-city districts "have a narrower range of course offerings and fewer opportunities for advanced and college-preparatory coursework than their suburban counterparts."

Given the persuasiveness of metropolitan inequality, federal categorical programs are particularly needed in narrowing the educational gap between the haves and have-nots. For example, to combat "concentration effects" in the classroom, schools in major urban centers need additional federal resources to provide support services for the targeted population. In an eight-district study on Chapter 1 resource allocation, large urban districts were found to spend fewer dollars on the classroom because their students need noninstructional support services. For example, Dade county and Detroit were found to have spent 14% and 22%, respectively, of the program funds for parental involvement, in-house training, educational specialists, and supplies and equipment. In contrast, the smaller districts merely allocated between 1 to 6% of the Chapter 1 money for support services (U.S. General Accounting Office, 1992a).

The second area where the federal role can make a difference is in helping needy schools to build up their organizational capacity. In this regard, federal categorical programs should focus less on auditing compliance and more on within-school coordination. Michael Kirst (1988) has suggested a federal role that is less regulatory but more supportive in technical areas. In schools with many children from low-income families, federal initiative to promote schoolwide projects is a good example. To that end, disadvantaged children would be better served if they were taught the core academic curriculum in the regular classroom, placed in heterogeneous groups, and asked to perform to higher academic expectations (see Dreeben & Barr, 1988). In sum, federal categorical programs can be redesigned to make a real difference in classroom learning.

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Part III

FORGING SCHOOL CONNECTIONS WITH FAMILY AND COMMUNITY

Nine:

PARENT PROGRAMS: PAST, PRESENT, AND FUTURE PRACTICES

Aquiles Iglesias

INTRODUCTION

The importance and positive effects of early intervention for developmentally vulnerable children[1] have long been recognized (Berrueta-Clement, Schweinhart, Barnett, Epstein, & Weikart, 1984; Copple, Cline, & Smith, 1987; Darlington, Royce, Snipper, Murray, & Lazar, 1980; Zigler & Berman, 1983). Studies have also noted that the significant gains made by children who participate in these programs fade over time (Haskins, 1989; Hubbell, 1983; White, 1985). Reynolds (1992) suggests that "a complex network of effects may be at work, whereby the maintenance of the positive effects of preschool programs are [*sic*] dependent on intervening variables experienced after the intervention ended" (p. 140). One factor that might account for the diminishing long-term effects of these programs is children's social environments. The Kauai study of Werner and associates (Werner, Bierman, & French, 1971; Werner & Smith, 1982) supports the notion that children's social environments act to foster or impede the maintenance of positive developmental courses. These studies and others suggest that the focus of intervention efforts, which in the past has been mainly on changing the children themselves, must be expanded to include changing children's environments. Subsequently, since children are inextricably embedded within the family and the family is often viewed as children's most immediate and influential environment, family members (primarily mothers) have been the central focus of numerous intervention programs.

Empirical evidence strongly suggests that family members who are actively involved in their children's education as part of or subsequent to an early intervention program (Shonkoff & Hauser-Cram, 1987; Reynolds, 1989, 1992) become "better" socializers of their children and enhance their children's educational outcomes. These and other findings (Bronfenbrenner, 1974; Dornbusch, 1988; Eagle, 1989; Henderson, 1988; Hester, 1989; Lazar & Darlington, 1982; Seitz & Apfel, 1991; West, Rasinki, & Camburn, 1990) have demonstrated the positive relationship between parental involvement[2] and children's educational achievement. As will be discussed in a subsequent section of this paper, this relationship is not as simple as has been suggested in the literature. Despite the general consensus on the value of parental involvement and the public and private sector support for such programs, there continues to be great concern over the lack of involvement of families in their children's education (Clark, 1983; Comer, 1984; Delgado-Gaitan, 1990; Laosa, 1983). Some authors have charged that the source of this problem lies in the barriers placed by school systems, while others feel that it originates with parents.

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[1] The term "developmentally vulnerable" is used throughout this text to describe those children who, due to social, biological, linguistic, and/or economic conditions, are at risk for developmental delay.

[2] The term "parental involvement" is used throughout this text to refer to any activity that parents do with their children to foster academic success. These activities are not limited to academic tasks.

Davies (1992) suggests that strengthening the relationship between home and school requires a widespread shift in school practice, and that this shift has not occurred due to the traditional mindset of school personnel, a gap between theory and practice, and a lack of a comprehensive policy framework. The lack of parental involvement cannot, however, be attributed solely to school personnel. An international study of parental involvement found that, regardless of income, families in the United States, England, and Portugal tend not to actively participate in their children's education (Davies, 1988). In one study, Rothman (1990) found that only one third of the parents interviewed had contacted schools about their children's academic progress, with higher income parents being most likely to initiate contact. Nicolau and Ramos (1990) found Latino families, whose children's academic performance is on the average below that of White and African-American children, participate at a rate that can be described as "low to nonexistent." This pattern is of great concern because poverty and social disadvantage have often been associated with educational underachievement.

The most cited studies on the effects of parental involvement on children's academic achievement (Bronfenbrenner, 1974; Comptroller General, 1979; Datta, 1971; Florin & Dokecki, 1983; Karnes & Lee, 1978; Lazar, 1981) support the notion that programs involving parents are more effective than those that do not. The strength of the database from which this conclusion has been reached was questioned recently by White, Taylor, and Moss (1992). Regardless of whether a database is available to support parental involvement in intervention programs, current sociopolitical pressures to get parents more involved in their children's education is strong and will likely continue. At this point it would be useful to reflect on what has led to present practice (a historical perspective), examine present practice, and propose ways of diminishing the gap between theory, research, and practice

Historical Perspective

The concept of parental involvement in education is a not a new one; however, over the last two centuries, it has taken on new meanings and been shaped by the various prevailing philosophies of childrearing and parent participation. (Berger [1983] provides a useful historical summary.) Parental involvement was being discussed as early as the eighteenth century in the United States. At that time, the phrase "parental involvement" denoted childrearing advice given through pamphlets, typically by Protestant-Calvinist mothers concerned about the moral and religious education of their children. During the late eighteenth and early nineteenth centuries, groups and associations were formed by mothers who sought information on child-rearing and consulted "experts" in the field for advice. The American Association of University Women, the Child Study Association of America, and the National Congress of Parents and Teachers (which came to be known as the "PTA") were three major groups that organized parental education efforts. These organizations were mostly composed of middle- and upper-class women. At the same time, "underprivileged" mothers were the beneficiaries of experts' advice through settlement houses. Over the years, the focus of parental education efforts evolved from children's moral and religious development to their emotional, physical, and mental health, and personality growth. During the 1960s, this focus broadened to include cognitive growth as concern for this area of development swept the nation, partially as a result of Russia's successful Sputnik launch.

The period between the early 1900s and the 1950s was marked by an explosion in parent programs and increased membership in parent organizations such as the PTA (from 60,000 in 1915 to 9 million in 1950). During this period, parental involvement focused on participation in education courses that centered on children's social and emotional development. Parental involvement followed the prevailing view that the intellectual development of children and the formal learning of reading, writing, and arithmetic began when children entered school. Parents' roles were simply to be supportive of teachers and schools.

Major antipoverty legislation enacted in the 1960s had a substantial impact on parental involvement. The 1964 Economic Opportunity Act provided for a variety of Community Action Programs (CAPs) that encouraged active participation by members of the community in the development, implementation, and administration of programs. This legislation, greatly influenced by the civil rights movement, addressed marginal groups' (particularly the poor and racial/ethnic minorities) desires for shared governance and self-determination. Although not without its critics, the first Head Start programs emerged from a CAP. (For a complete history of Head Start's development, see MIDCO, 1972; Zigler & Valentine, 1979.) Head Start, first conceived as a summer program, was designed to prepare children from low-income families to enter school. Unlike other CAP efforts, parents were first seen as "adjuncts to the program, not central to it" (MIDCO, 1972, p. T-64). In subsequent years, the roles of parents were more clearly defined as learners, teachers, and decision makers.

The role of the parent as learner stemmed from an underlying premise of Head Start's developers that low-income parents needed to learn how to provide "adequate" educational environments for their children. Although not described as such, this deficit model assumed that many of the academic difficulties that low-income children encountered were due to the inadequate preparation they were receiving at home. Consistent with their role as decision makers, as delineated in the Head Start Policy Manual, parents were to decide on their own specific educational needs. However, the extent to which parents were aware of their rights and the loci of true power has been questioned since Head Start's inception. The role of parents as teachers was seen as a mechanism by which parents could transmit what they had learned to their children. The assumption underlying this role, though, was that parents were teaching attitudes and skills that were inappropriate or counterproductive to academic achievement--a deficit model orientation.

The success of Head Start programs, especially their parental involvement components, has had an influence that extends beyond their immediate recipients. For example, parental involvement has become an integral component of the Chapter 1, Even Start, and Family English Literacy Programs. The most recent legislation affecting the rights of disabled children, P.L. 99-457, requires parents to be integral members of intervention teams.

During the late 1970s, a wave of school and teacher education reforms began, many of which are still under way. The effective schools movement emerged during this period, spawning many programs that emphasized in-school activities, such as school, classroom, and student management (Edmonds, 1979). The parental involvement aspects of these programs focused primarily on the decision-making roles of parents.

Concurrently, although not reaching its greatest height until the last few years, there has been a renewed interest in parents as learners and teachers. This renewed interest is due to the national need to be more economically competitive, the need to reduce social inequality and instability, and political reality (Davies, 1992). Economic competitiveness as it relates to education is an issue that has generated much discussion of late. Walberg (1984) suggests that unless America invests more heavily in its children's education, "Australia, Africa, and North and South America are to be [no] more than hinterland farms, mines, and smokestack industries." Arguing from a "production" perspective, Walberg maintains that children's nonschool hours could be more productively spent in a home curriculum that promotes academic achievement. This "increased productivity" could be achieved without large increases in cost (Davies, 1992).

The issues of social inequality and instability have as much of their root in *noblesse oblige* as they do in economic reality. As a country, we have been proud of our belief that "all men are created equal" and, as such, we strive to eliminate any vestiges of inequality. At the same time, future economic growth will depend on a technologically advanced populace whose products can compete in world markets. Whether or not it is based on the notion of economic competitiveness, there is some consensus across the nation that the task of teaching children cannot be accomplished by schools alone, and that families must become more active in their children's education.

History tends to repeat itself. Twenty-one years ago, Piven and Cloward (as quoted in MIDCO, 1972) noted:

> . . . the situation came to be looked [at] as critical. What appears to have stimulated this awareness was the breakdown of social controls, as evidenced by the rise of juvenile delinquency, the increase in drug addiction, and an increase in serious crimes; massive unemployment--the rule of thumb is that unemployment among Blacks is usually twice the national rate and unemployment among young Blacks is four times as great; the extent [to] which young people in inner cities were dropping out of school; and the rise in welfare caseloads, female-headed households, and illegitimacy. (p. I-33)

The critical problems that were facing our country in the early 1970s gave rise to numerous programs designed to ameliorate them. Today's "new" problems, similar to those faced in the 1970s, have also given rise to a multitude of programs. The extent to which any of the existing solutions will eliminate these problems awaits the test of time.

Present Practices

The premise that the family exerts a significant impact on educational outcomes has stimulated a variety of intervention programs that feature, as a major component, parental involvement. The term "parental involvement" has been used quite generically to refer to a range of activities involving parents. Some intervention programs have focused on parents as learners, some on parents as teachers, and some on parents as decision makers; still others have incorporated two or three of these roles. Ascher (1987) suggests that parents can play a variety of roles ranging from active decision makers to passive recipients of information mailed by schools. However, the recent focus seems to be on parents as teachers and learners:

> Increasingly, parent involvement means parents initiating learning activities at home to improve their child's performance in school . . . what parents can do naturally in the home to socialize their children and what schools can do to help parents be more effective in the home. (Ascher, p. 5)

Epstein (1990) suggests that changing the major location of parental involvement from the school to the home would result in a greater and more productive type of involvement.

Regardless of the role(s) targeted, intervention programs designed to involve parents in their children's education are based on several assumptions, five of the most significant of which are examined below.

Assumption 1: Parents' Attitudes and Behaviors Are Not Generally Conducive to Their Children's Academic Achievement

There is a general belief that the preparation for learning that many children receive at home is inadequate or differs fundamentally from what schools expect. This "deficiency" has been associated with differences in attitudes and beliefs about schooling among poor families, poorly educated mothers, recent immigrants, and racial/ethnic minority groups (Kurtz, 1988; Liontos, 1992; Nicolau & Ramos, 1990; Peng & Lee, 1991) or changes in the family structure, such as the emergence of single-parent homes, female-headed households, and teenage parents, which have "eroded the traditional social network through which parenting skills were passed from one generation to the next" (Preparing Young Children).

Clark (1983) argues that it is not specific sociodemographic characteristics of families but rather the "quality of family life-style" which determines how well a family prepares children to be academically competent in the classroom. This "life-style" is, according to Clark, determined by a multiplicity of factors, such as parents' upbringing, past relationships and experiences with institutions, current support network, social relationships in and out of the home, and satisfaction with their present socioeconomic status (SES). Despite Clark's broader ecological perspective, the majority of studies presently available focus on specific subgroups whose memberships are determined by sociodemographic characteristics.

Several authors have commented on the lack of preparation for schooling that poor and racial/ethnic minority children receive at home. Kurtz (1988) states

> . . . poor children frequently enter school without readiness skills, often with physical and mental handicaps, and are at risk for school adjustment problems. Some kids reach kindergarten, for instance, without having been read to or even talked to and can interact with other children only by hitting.

Nicolau and Ramos (1990) comment that "most low-income Hispanic parents are unaware of specific practices--such as talking and reading to children and encouraging their curiosity." Liontos (1992) believes that some children have underdeveloped language skills because of cultural norms and parents' reading deficiencies, and further suggests that many parents do not feel capable of carrying out these activities.

The research literature has provided considerable evidence of the relationship between specific home variables and school achievement. These studies have related family literacy (Heath, 1983; Snow & Ninio, 1986; Taylor & Gaines, 1988), parent discipline practice (Datcher-Loury, 1988; Ritter & Dornbusch, 1989), household composition (Thompson, Alexander, & Entwisle, 1988), and SES (Baker & Stevenson, 1986; Coleman, 1987; Entwisle, Alexander, Cadigan, & Pallas, 1986; Lareau, 1987, 1989; Leitch & Tangri, 1988) to academic achievement. Each of these studies supports the notion that the aforementioned variables have considerable influences on academic achievement. Peng and Lee (1991), in a large-scale study using NELS:88 data, found that low-SES and minority families' poor home environments showed a strong relationship with academic achievement. They suggest that, "lack of proper knowledge in caring for and educating a child is probably the major factor of poor home environment." They further suggest that what is required is parents' commitment to their child-care responsibilities and an understanding of their important roles in ensuring that their children perform well in school. These roles include providing appropriate environments, spending more time with children, discussing schoolwork and other matters on a regular basis, checking homework, and setting higher educational standards.

It is difficult, if not impossible, to argue against the mounting evidence that supports the notion that specific sociodemographic variables are related to academic achievement. However, taken together, these variables fall short of capturing the process by which parents prepare their children for school (Clark, 1983). In addition, they tend to perpetuate stereotypes of particular groups. What seems to be needed are more holistic views of how learning is influenced within specific families, how this learning is affected by the family unit's relationship to other social networks, and how elements of families' ecologies shape the context of learning. These views must also take into consideration where and how this learning is to be displayed. A mismatch between parents' child socialization practices and school expectations does not necessarily imply that parents' attitudes and behaviors are not conducive to academic achievement. An alternative view is that schools have not adapted their instruction to a variety of child socialization practices.

Assumption 2: Programs Designed to Address Parent's Individual Needs Will Be Developed

Dunst and his colleagues (Dunst & Trivette, 1988; Trivette, Deal, & Dunst, 1986) have argued that provision of support has its greatest impact when it is offered in response to families' self-identified needs. According to these researchers, support that is offered when families have not identified specific needs has minimal or even negative effects. They further suggest that adequate determination of families' needs must precede any type of intervention. This determination will ensure that the services provided are positive, proactive, responsive, and individualized.

A need exists, according to Bennett, Lingerfelt, and Nelson (1990), when there is a "discrepancy between the help-seeker's assessment of his/her actual situation and the desired situation." Recognition of needs requires individuals to seek solutions and put forth the efforts necessary to fulfill these needs. The most basic of needs, according to Maslow's (1954) hierarchy of needs, are physiological ones. According to this hierarchy, individuals will not devote considerable energy to satisfying higher level needs unless more basic needs are satisfied. It is this environmental press that will "guide an individual in a particular direction" (Garbarino, 1982, p. 13). For example, significant life stresses associated with poverty may force some families to assign children's developmental needs lower priorities than do middle- and upper-SES families. Once basic needs are satisfied, families can seek solutions and put forth efforts to satisfy higher level needs such as child development.

The research literature on the efficacy of programs that attempt to meet parents' individual needs is scarce and tends to demonstrate the difficulties involved in programs attempting to extend their activities beyond the family-child system--a requirement for almost any program intended to address the needs of developmentally vulnerable populations. Brinker, Frazier, and Baxter (1992) assisted parents in decreasing self-identified barriers to participation in an early intervention program. Despite the individualized nature of the intervention, no difference in participation was found between the control and experimental groups. Brinker and his colleagues acknowledge that their efforts were "like trying to light a fire in a hurricane" and that the lack of collaboration among social agencies greatly hindered the success of the program developers' efforts.

The majority of existing programs have rarely taken into consideration parents' self-determined needs. Instead, program developers have focused almost exclusively on their own perceptions of parents' educational needs, usually basing their designs on one of two perspectives. One approach holds that parental education programs should assist parents in providing more adequate environments for their young children. This perspective often assumes that parents are unaware of, or incapable of identifying, their own educational needs. Thus, parents rarely decide the content and method of the information conveyed to them. In most programs, information is offered without determining families' priorities for such information. A somewhat different perspective is that parents need to learn the skills and strategies necessary to function and manipulate the "system" (i.e., to become informed consumers and decision makers). A large number of activities labelled as "parental involvement" have been designed to meet this need (e.g., parents' participation in policy councils and other school-based decision-making forums).

Ideally, parent programs should be tailored to the individual needs of each family. Since no two families are alike, and what has worked for one family in the past will not necessarily work with another in the future, it is important to set aside the inclination to categorize according to preconceived notions about these families or their needs. It is essential that we begin asking families what they want, rather than providing them only those services immediately at our disposal. We must recognize the heterogeneity of families and attempt to avoid the error of forcing each family to fit into a single type of program. It is also important to realize that respecting families' wishes implies that we must also accept their refusal of our services.

Intervention programs that take parental needs into consideration and attempt to assist parents in solving problems may be more difficult to implement and possibly more expensive than existing programs. However, these programs will probably be more successful at reaching their objectives.

Assumption 3: Parents Will Participate in Programs

Getting parents involved in the education of their children has been the overall goal of numerous intervention programs; this concept, however, has been defined in a variety of ways (Collins, Mole, & Cross, 1982; Epstein, 1990; White, Taylor, & Moss, 1992). Epstein (1990) has identified five types of parental involvement, two of which (Basic Obligations of Parents and Parent Involvement in Learning Activities at Home) focus on what parents can do in the home to ensure "positive home conditions that support school learning and behavior." A third type focuses on the type and frequency of communication between home and school. Involvement in school activities (volunteering in the classroom or other school events and attending school functions) is central to the fourth type of parental involvement. The last type discussed by Epstein concerns parental involvement in government and advocacy.

White, Taylor, and Moss (1992) distinguish between two types of parental involvement based on the direct beneficiary of the intervention. Parent programs in which the child is the direct beneficiary focus on parents as interveners and classroom aides, and emphasize parent/child relations and sensory stimulation. Programs in which parents are direct beneficiaries focus on emotional support, resource access, parenting skills, job training, knowledge of child development, and respite care. Analyses of 172 early intervention programs with substantial parental involvement components revealed that, in the majority of cases analyzed, parents used as interveners were the sole or major focus of programs (White, Taylor, & Moss, 1992). The consistency of this finding across programs that involved disabled, at-risk, and disadvantaged children reflects a large gap in our present research base.

Regardless of how parental involvement is defined, program developers have often found themselves frustrated at low levels of parental participation. Mayer and Meshel (1982), who developed an early intervention program for high-risk children, found that 24% of families referred to the program would not consider participating in the program, and 40% dropped out within three months. Slaughter (1983) recruited subjects by canvassing mothers in an entire housing project. One third of these mothers refused to participate, and 50% of those who did dropped out during the two years of the study. Bricker (1986) found that only 20%-40% of these parents were actively involved in the program. Meyers and Blacher (1987) noted that 31% of these families had only rare communication with their children's schools, while 5% had none at all, even though these were children with severe disabilities, and approximately 50% of these parents reported no, some, or little involvement in their children's education.

Lynch and Stein (1982) surveyed parents of disabled children to gauge their participation in individualized education program (IEP) meetings, a requirement under P.L. 94-142. Of the 400 parents surveyed, nearly three fourths reported that they were actively involved in the development of their children's IEPs. However, only 47% of these parents made suggestions during the meetings. Participation rates varied across racial/ethnic groups, with white parents being more active. In a follow-up study, Lynch and Stein (1987) found that half of the Latino families interviewed were not active participants in the development of their children's IEPs, and only 34% actually offered suggestions during the meetings.

The extent to which parents' participate in any type of school-based activity appears to be influenced by several factors, including the children's educational levels (Berla, 1991; Epstein, 1986; Gotts & Purrell, 1987; Perez, 1985), whether the schools are urban or rural (Gotts & Purrell, 1987), and children's educational achievement (Clark, 1983).

Parental involvement tends to be greatest in the early years and declines thereafter as a result of different types of barriers. Thus, it might be a mistake to apply an early childhood model of involvement when evaluating parental involvement at higher grades. Perez (1985) found that parents who were eager to participate actively in their children's education encountered certain barriers when their children transitioned from Head Start to kindergarten. These barriers included (a) less teacher time to devote to parents; (b) larger class sizes and absences of child care; (c) free lunches when parents volunteered in classrooms; (d) links with social service agencies; (e) programs designed to improve parenting skills (most school programs focus on children); (f) and transportation to school with children. Berla (1991) discussed various factors that make parental involvement at the middle school level even more difficult, including the (a) impersonal structure of many middle schools, (b) attitudes of boys and girls in adolescence, and (c) lack of school encouragement for parental participation. Despite their greater need for individual skills such as negotiation and information gathering (Useem, 1990), parents of older students typically receive less assistance (Epstein & Dauber, 1991), especially if their children are educationally and economically disadvantaged (Epstein, 1992).

Gotts and Purrell (1987) identified further differences between parental involvement at the elementary and secondary levels. At the elementary level, relations are physically closed and involvement is expressed by being present. At the secondary level, relations occur at a greater distance. For example, parents of elementary school children attend general parent group meetings, while secondary school parents tend to attend special-purpose group meetings such as athletic events or plays. At the elementary level, parents monitor school programs by visiting schools, reviewing their children's work, and discussing progress with teachers. At the secondary level, monitoring is accomplished by reading newsletters; school visits and teacher contact usually only occur when problems arise. Gotts and Purrell

(1987) also examined teachers' practices and parents' views concerning involvement in urban and rural areas. In urban areas, reduced opportunity for informal contacts between parents and their children's teachers was compensated for by the scheduling of additional formal meetings.

Children's achievement levels correlate the extent of parental involvement. Clark (1983) found that parents of low achievers avoided school contacts, while parents of higher achieving students were more assertive. The work of Lareau (1989), on the other hand, suggests that the extent to which parents become involved in their children's education varies as a function of the parents' SES, regardless of achievement--the higher the SES, the more involvement.

Most of the extant research on parental involvement has taken a unidimensional perspective in which one or two variables are correlated to parental involvement. Lareau's (1989) work suggests that multiple, interrelated factors may contribute to parental involvement. In her studies of two communities in California, she found that different interrelated social networks (family, marriage, work, and school) had effects on how parents viewed schools and learning. These interrelated networks influenced the extent and types of involvement parents had with schools and their children's learning at home.

In contrast to the research literature, the literature on best practices tends to focus on multiple factors that contribute to parental involvement. This literature has focused on the identification of obstacles to parental involvement and descriptions of methods of overcoming them. Liontos (1991) suggested that some of these obstacles are "due to benign neglect . . . to political or professional barriers . . . to emotional barriers felt by the parents . . . and to ignorance, lack of awareness, and misunderstanding." Liontos distinguishes between two types of barriers--barriers for parents and barriers for schools and teachers. Barriers for parents include (a) feelings of inadequacy, failure, and poor self-worth; (b) negative attitudes and bad experiences with schools; (c) suspicion that schools are not treating them equally; (d) "leave-it-to-the-schools" attitudes; (e) cultural and language barriers; (f) economic, emotional, or time constraints; and (g) logistical problems such as child care and transportation. Barriers for schools and teachers include (a) inabilities to commit to parental involvement programs; (b) confusion about the roles of teachers; (c) concerns about turf and territory; (d) doubts about their abilities to work with at-risk parents; (e) beliefs that at-risk parents are apathetic, difficult people with whom to work, and will not keep commitments; (f) low teacher expectations for at-risk children; (g) assuming passive roles or failing to help parents feel welcome; (h) the fact that communication from school often focuses on negatives; and (i) lack of time and funding.

Numerous methods of overcoming the obstacles mentioned above have been proposed. However, for the most part, these approaches have not been studied with any degree of scientific rigor. The lack of systematic studies on the effects of individual practices is best illustrated in the U.S. Department of Education Report, *Working with Families* (Goodson et al., 1991). The purpose of this study was to identify and describe promising strategies in family education programs that focused on working with low-income families. The primary goal of these programs was the enhancement of children's cognitive development and school success. As the authors commented, "few family education programs studied carried out summative evaluations with rigorous experimental design" (p. xii). For example, all programs used a variety of recruitment (e.g., door-to-door solicitation, hanging posters throughout communities) and retention approaches (e.g., tangible rewards, holding meetings at convenient locations and times). Without any systematic evaluation of these components, however, it is impossible to ascertain whether one or a combination of these approaches, or other factors not considered by the program developers, were responsible for the "success" of the programs.

The issue of whether any of these efforts can be considered successful is also questioned. With some exceptions, very little information is provided on the potential number of participants. Rather, only information on the number of actual participants is provided. Thus, it is impossible to determine the number of individuals who would have participated regardless of recruitment or retention efforts. Again, without systematic studies, no definite conclusions can be reached on the value of these efforts.

The authors of the aforementioned U.S. Department of Education report (Goodson et al., 1991) suggest that rigorous evaluation research "will have to come from the wider research community rather than from the programs themselves." Although the reasons programs have not embarked on rigorous evaluations are understandable, we cannot afford to continue implementing programs solely on the "experience of seasoned practitioners and careful analysis of local needs" (Moles, 1987, p. 142).

Assumption 4: Program Content and Approach Will Lead to Changes in Attitudes and/or Behaviors

From an ecological perspective, there can be no single blueprint for parent programs. Each program's content and approach must be sensitive to the ecologies in which the families it intends to serve live. From this perspective, one can argue that examining the characteristics and practices of "successful" families (generally middle- and upper-class white), and attempting to transfer their skills and attitudes to less successful families, is inappropriate and might lead, in some situations, to counterproductive outcomes. However, for the most part, this transfer of skills and attitudes is exactly how parent programs have been organized. As pointed out by Liontos (1992), the literature on parental involvement is "filled with prescriptions and ideas that are most effective with middle-class parents and families" (p. 2). Given the importance of the home curriculum on academic achievement, it is not surprising that many parent programs have focused on providing parents with information on child socialization practices and on ways in which parents can provide children academically enhancing activities outside of school.

Numerous authors (Au & Jordan, 1981; Erickson & Mohatt, 1982; Heath, 1983; Iglesias, 1985; Kochman, 1982; Philips, 1972; Ramirez & Castaneda, 1974; Saville-Troike, 1979) have noted the lack of congruency that exists between the socialization practices of nonmainstream populations (poor and racial/ethnic minority groups) and the skills required to succeed in the American educational system. As pointed out by Saville-Troike, "[The American educational system] is one which serves primarily to prepare middle-class children to participate in their own culture" p. 141.

Researchers, program developers, and practitioners often fail to recognize that there are numerous means to developing competent adults (the goal of socialization). The recommendations of many researchers and program developers and the present practices of many practitioners focus on a unidirectional path rather than the potential equifinality of numerous paths. Ascher's (1987) statement that socializing children for school means "conveying the importance of education, supporting teachers' activities such as homework and attendance, and [being] willing to participate in school activities" should be considered one, not the only, avenue to academic achievement.

The "unidirectional-path-to-success" perspective has led many program developers to focus their training on providing parents with a knowledge base that the developers feel parents need in order to enhance their children's development. For the most part, the developers of these programs have focused on what they consider to be parents' gaps in knowledge, and have assumed that providing parents with these often disconnected bits of information will change their present practices. They have also assumed that changes in practices would increase continuity between home and school and lead to positive educational outcomes.

Various approaches have been taken to provide parents with necessary information, including home-based programs, joint child/parent classes, parent group meetings, and written curricula. Some programs, such as AHEAD, Home Base, HIPPY/Miami, and Prestame Una Comadre, have used home-based approaches in which program staffs visit families in their homes and demonstrate desired skills. Despite its appeal as a highly personal type of interaction, available data does not support the notion that homogeneous, home-based intervention is effective (Epstein & Weikart, 1979; Field, Widmayer, Greenberg, & Stoller, 1982; Gray & Ruttle, 1980; Jeste & Guinagh, 1983; Ramey, Bryant, Sparling, & Wasik, 1985). However, the work of Rosenberg and Robinson (1985) suggests that this ineffectiveness might be more related to the types of curricula offered than to whether the training is done at home. Rosenberg and Robinson found that parents who, prior to intervention, were receiving standard home visitations that focused on development and use of home visitors as models showed dramatic increases in quality of parenting behaviors when the interventions were targeted specifically to dyads. Joint parent/child programs in which parents and children are actively involved in individual tasks and are provided feedback by parent program monitors have been effectively used in several programs, such as HIPPY/Miami, Keenan Trust Family Literacy Program, and Project Fiel. Based on Rosenberg and Robinson's data on individualized programs, this type of approach should be successful provided that programs' training has spillover effects on how parents interact with their children after they exit the program.

Parent group meetings is another approach used to provide parents with information. In this type of program (e.g., Family Study Institute, HIPPY/Miami, Project AHEAD, McAllen Parental Involvement Program), parents attend group meetings in which particular topics, usually related to school curricula or child development, are presented. The advantage of this approach is that parents are given opportunities to interact with other parents and, since many of these programs are held at school, with school personnel. A drawback of this type of program has been described previously--parents are reluctant to become involved in school-sponsored activities. Yet another approach taken by some programs (e.g., TIPS-Math, ABT Program) involves providing parents with written curricula only. Although easy to implement, this program does not provide much interaction among parents and among parents and staff.

As noted in the Goodson et al. (1991) report, "There is no evidence that one approach works best with all families or with all staff" (p. 70). None of the "promising programs" examined by these researchers had attempted any empirical means of evaluating the effects of various approaches on parents with distinct characteristics. As noted by the authors, "discussions with program staff reveal hypotheses about the match between program approaches and parent characteristics, but, thus far, these hypotheses have not moved beyond practitioner knowledge into research evidence" (p. 103).

There are, however, data suggesting that the type of approach used may be determined by program philosophies concerning the natures of problems. Farran (1990) compared the degrees of parental involvement in 74 intervention programs (42 programs for the disabled, 32 for the disadvantaged). Parents of disadvantaged children were viewed by staff as part of the "problem"; as such, staff considered themselves the best interventionists (50% of program time was devoted to staff-only activities). On the other hand, staff working with disabled youngsters viewed the "problem" as lying within the children themselves, which caused different attitudes to prevail. Parents in these programs were more often perceived as appropriate intervention agents (only 31% of program time was devoted to staff-only activities). Of even greater significance was the time spent by staff and parents working together (40% in the programs for the disabled, 22% in the programs for the disadvantaged). Parents of disabled children participated in activities specifically related to children's disabilities (e.g., diapering children with cerebral palsy--a direct and overt relationship between activity and problem), while the activities in which disadvantaged parents engaged were not as easily connected to deficits (e.g., how to play more appropriately with materials). The extent to which different approaches to parental involvement are affected by program philosophies concerning the natures of problems is intriguing and deserves a much closer examination.

Another area in which programs differ is the content of their curricula. For the most part, curricular content for parent programs tends to focus on skills believed by program developers to be necessary for enhancing child development or children's future academic success. The majority of these curricula are locally developed and have not been thoroughly evaluated. Parent program curriculum developers often note how their curricula address the needs of the individual families for which they are designed. These accommodations usually refer to the translation of materials into the language spoken by the participants and the incorporation of superficial artifacts of the culture (e.g., foods, holidays). Ideally, parent programs are sensitive to local cultural values and beliefs and adapt curricula accordingly; unfortunately, however, very little information is available on how successful these programs are at doing so, and on how different cultural groups adapt to diverse parent programs.

Gordon (as quoted in Ascher, 1987, p. 9) suggests that establishing programs that are "reasonably well planned, comprehensive, and long lasting," as opposed to the fragmented, mismanaged forms they often take, is of primary importance. This approach to program development may satisfy various funding agencies, but it provides very little guidance to program developers attempting to base practice on solid scientific evidence.

Assumption 5: Programs Will Lead to Long-Lasting Behavioral and/or Attitudinal Changes that have Positive Effects on Children's Academic Achievement

All parent education programs are based on the assumption that the information which parents receive during training will change their behaviors and, indirectly, affect the behaviors of their children. However, the degree to which this is accomplished depends on a number of variables, some of which are related to parents, others to programs. The changes parents are asked to make are often very arduous and cannot be accomplished without long-lasting support. Some program participants must not only reorient their own ways of thinking, but must also persuade other members of their immediate networks to do the same, or at least support their efforts. Wachs & Gruen (1982) have speculated that the effects of intervention can only be maintained if parents have the time and social support to continue intervention, and the necessary motivation and skills. The skills, and to some extent the motivation, that these parents possess will be a direct result of the effectiveness of the individual procedures and methods used in the programs in which they enroll.

The characteristics of individual parents and the social environments in which they live are variables of which program developers and researchers must be cognizant, but over which they have little or no control. However, the procedures and methods used in parent programs *are* alterable and their degrees of effectiveness, both in the short run and in the more distant future, can be examined and modified. Our present research base does not permit us to make unequivocal statements concerning the effectiveness of parent programs; studies have been conducted, but many of them were conducted in manners that do not meet criteria for quality research.

The goal of any program evaluation is to document changes and demonstrate that these changes are relevant to the intervention program in some meaningful way. Ideally, evaluations meet standard criteria for quality research (Campbell & Stanley, 1966) and provide information on how the various aspects of programs interact to produce observed outcomes (Dunst, 1986). Rigorously controlled, systematic evaluations of parent programs are rare. Even less attention has been placed on isolating and documenting the effects of individual practices on students' academic achievement (Epstein, 1992). In part, the lack of empirically sound evaluation is due to the fact that programs are not scientific laboratories in which parents are randomly assigned to groups, multiple-criteria outcome measures that evaluate proximal and distal program effects are used, and situations allow for internally valid research designs.

Sample selections have been conducted, in general, on the basis of convenience, often slighting the more onerous tasks requisite in such scientific endeavors, such as making random selections from very large populations. Consequently, sampling biases are almost certain to taint the majority of these studies. For example, most parent programs rely on parents to volunteer for programs; since this results in self-selected groups, little randomization occurs. Routinely, parents who volunteer for particular programs are those who feel most comfortable with the particular approaches used. These parents are predisposed to benefit from such programs and are likely to participate for their durations. Nonvolunteers or parents who are less committed to particular programs are more likely to drop out. This raises the question of whether parents who participate for the entire length of programs are characteristically similar to those who drop out or do not participate at all. For example, Gourash (1978) found that individuals with strong and helpful informal networks are less likely to seek out help from formal support systems. Several studies have attempted to account for subject attrition by comparing initial samples to final samples on the basis of a few, usually demographic, characteristics; researchers have consistently found no differences between the groups. Whether the variables used to compare the two groups were correctly chosen is open for discussion.

In an attempt to decrease the heterogeneity of the subjects, the majority of studies have been conducted using what researchers consider to be homogeneous groups, usually defined according to race and SES. Most of the studies cited by prominent reviewers in support of the benefits of parental involvement in early education (Gray & Klaus, 1970; Karnes, Teska, Hodgins, & Badger; 1970; Radin, 1972) have focused on low-income, African-American parents. Although this group is disproportionately represented among the poor, the lack of data on other groups (e.g., poor whites and Hispanics) raises the question of the generalizability of the results of these studies to other populations.

An additional factor to consider when discussing the generalizability of studies of parent programs is the ages of the parents' children. For the most part, the literature has focused on children at the preschool level. Given the evidence that parents perceive their roles differently at different stages of their children's development (Ballenski & Cook, 1982; Galinsky, 1981), it is important to further examine the efficacy of these programs for older children.

Researchers often attempt to assess program efficacy by measuring programs' impacts on children's academic outcomes. Although substantial increases in academic achievement are often viewed as the ultimate goal of parent programs, researchers often fail to recognize that a constellation of variables supports academic achievement and that changing only one of these variables (e.g., how parents behave at home as a result of their parent training) may or may not be significant enough to alter children's performances on standardized measures of narrow ranges of child outcomes.

Despite the recognition that individual variation in parents' characteristics can play a role in determining the effects of programs, very few studies have analyzed their data on individual family levels. The unequal effects that programs might have on individual families tend to increase intersubject variability and decrease the probability of finding significant program impact. For example, some families may be seeking new information, while others may be seeking verification of current practices; a given intervention program may have significant impact on the former but not the latter.

Programs can have both proximal and distal effects. Proximal effects are those that occur during or immediately following interventions; distal effects occur after given periods of time have elapsed following interventions. The most powerful measures of program effectiveness are those that can be demonstrated long after parents have exited programs. However, finding large distal effects is difficult. Given the multiplicity of variables that can influence outcomes over long periods of time, a lack of distal effects does not necessarily imply "no effects" in the proximal sense. The logistical problems of assessing long-term program effects and the need by program directors for formative, rather than summative, evaluations has resulted in the undertaking of very few distal studies.

Present parent programs are a conglomerate of approaches that differ in goals, formats, and durations. Considerable variability exists in the duration and intensity of programs, as well as in the techniques used (e.g., group discussions, didactic instruction, modeling). It is difficult to determine from present studies which components are responsible, or even necessary, for change. Thus, it is not surprising that no distinct patterns of effects across different populations or program types have emerged in the literature.

Several comprehensive efforts to assess the effectiveness of parent programs have been conducted (Bronfennbrenner, 1974; Comptroller General, 1979; Datta 1971; Florin & Dokecki, 1983; Karnes & Lee, 1978; Lazar, 1981; White, Taylor, & Moss, 1992). With the exception of the White et al. synthesis study, all other major reviews suggest that adding parent components to existing programs would make them more effective. White and his colleagues do not argue against the effectiveness of parental involvement in programs, but note the failure of present research to support the claim that parental involvement has positive effects on program outcomes. Using the procedure described by White (1985), they analyzed 20 studies used by prominent reviewers to support the aforementioned claim, and 193 intervention versus no-intervention studies--some of which involved parents and some that did not. Only 5 of the 19 studies used to support this claim were judged to have high internal validity, and only 3 of the 19 were deemed direct tests of whether programs were more effective when parents were involved. Although the majority of the studies showed positive effect sizes, their lack of internal validity, as well as their overall design, made it impossible to support, with any degree of certainty, the conclusions of previous researchers. Analyses of effect sizes of intervention versus no-intervention studies with high internal validity indicated no differences between those programs in which parental involvement was extensive or moderate and those in which it was not. As pointed out by White et al. (1992), "the benefits of parent involvement in early intervention programs have gone far beyond the available scientific evidence . . . [and] we can find no credible scientific support for benefits described by prominent researchers, policymakers, or administrators" (p 120).

CONCLUSION: FUTURE PRACTICES

A general consensus presently exists among different stakeholder groups that partnerships between schools and families, in which each of these two institutions share major responsibility for the children's education, should be part of the solution to many of the social and economic problems presently facing our society. For some families and schools, these partnerships will require major realignment; for others, this will not be necessary. It is not surprising, but somewhat ironic, that the greatest realignment will be asked of those who have the least power and resources in our society--the poor and racial/ethnic and linguistic minorities. Regardless of how we, as individuals, feel about the social correctness of these changes, the present sociopolitical forces will press us into forging stronger partnerships between families and schools. The extent to which these partnerships succeed will depend on the extent to which we develop programs that are sensitive to the needs of the families we seek to help, as well as the extent to which we begin to base our programs on scientifically proven, cost-effective practices.

What we believe about how parents should behave within their family, marriage, work, and school networks reflects our values and, to some extent, the values of the cultural groups with which we identify. These beliefs and values are deeply ingrained and serve as a template from which we compare the beliefs and actions of others. The challenge we face as professionals is to develop an awareness of the diverse beliefs and practices represented in our pluralistic society and to examine the manners by which our programs and practices are guided. This awareness requires that we use an array of service delivery options that are, as much as possible, individually tailored to match family needs and styles. The ethnocentric view that proposes that all families will benefit from a single set of intervention practices, regardless of whether they are "best practices," must be discarded. Families are more likely to invest in intervention goals congruent with high-priority family goals, and they are more likely to implement those professional recommendations that match their values and beliefs.

At a minimum, a philosophy that supports and enables culturally sensitive intervention practices would incorporate an awareness of one's own values and beliefs about a variety of family-related issues, the knowledge that families are comprised of unique individuals and that this uniqueness influences how we define and adapt to events, and a commitment to honoring a broad array of family definitions, styles, and coping strategies.

One of the most surprising features of our present literature on parent programs is not the overwhelming evidence for or against it, but the lack of data to substantiate any of our present practices. Our existing data base must be greatly expanded to include information on a variety of topics. We need to have a greater understanding of family life from developmental and cross-cultural perspectives, and of how it influences children's and parents' school-related behaviors. Greater attention should be placed on conducting research studies that are scientifically valid and address the individual components of programs than on conducting studies of the overall effectiveness of highly diverse, almost always nonreplicable programs.

Negative events in history repeat themselves when we fail to learn from the past. If we continue to base our programs on unproven practices that are not ecologically sensitive, we will continue to face the "new" problems faced in the 1970s and in the 1990s.

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Ten:

THE EFFECTIVENESS OF COLLABORATIVE SCHOOL-LINKED SERVICES

Margaret C. Wang, Geneva D. Haertel, and Herbert J. Walberg

INTRODUCTION

Across the U.S., innovative school-linked health and human services programs are being implemented to provide assistance to children and youth in high-risk contexts. These programs reach out to families beset by urgent problems including poverty, teenage pregnancy, single parenthood, substance abuse, limited health care, and inadequate and unaffordable housing (Levy & Copple, 1989). These problems place children at risk of school failure and, by necessity, place schools at the nexus of interconnected social problems.

For many years private and public community agencies provided psychological, financial, medical, and job training assistance to individuals and families in at-risk circumstances. These individual agencies, however, often have heavy caseloads, limited resources, and are isolated from other service providers (Chang, Gardner, Watahara, Brown, & Robles, 1991). Increasingly, educators have cautioned that schools alone cannot respond to all these problems (Council of Chief State School Officers, 1989). Kirst (1991a) argues that more systematic social policies must be developed. Schools, according to Kirst, can no longer rely on their own school boards and property taxes to guarantee the well-being of students. The creation of interagency collaborative health and human service programs can provide a high-quality response to the problems faced by students in at-risk contexts. These collaborative programs would be linked to schools and other service agencies to prevent the overburdening of schools or any single agency.

Interagency collaborative programs reach out to those at greatest risk and mobilize resources to reduce and prevent school dropout, substance abuse, juvenile delinquency, teen pregnancy, and other forms of modern morbidity. Nearly all school-linked programs develop mechanisms for effective communication, coordinated service delivery, and mobilization of resources of communities.

Most of these innovative collaborative programs, although enthusiastically embraced, have not provided evidence of replicable, long-term, beneficial effects on students. The lack of empirical information documenting the near- and long-term impact of these innovations is a source of concern. Schorr (1988) concludes that: "Many Americans have soured on throwing money at human problems that seem only to get worse. They are not hard-hearted, but don't want to be soft-headed either" (p. xvii). Increasingly, policymakers recognize the high cost of social programs that are not evaluated for their immediate, intermediate, and long-term effects. In addition, evaluators often only assess the impact of narrowly defined services, but fail to assess the combined effects of multifocus interventions. Policymakers, school practitioners, and service delivery agencies do not have adequate information about program features and the implementation of innovative programs. This chapter presents a first attempt at establishing an empirical database documenting the relative effects of collaborative school-linked services serving children and their families in at-risk contexts.

A Chronology of Collaborative School-Linked Services

Since the 1890s, improving the plight of poor children and youth has been a goal of the U.S. public school system (Tyack, 1992). During the past century, social reformers advocated schools as the coordinating organizations that could orchestrate community services and remedy a wide range of social ills. Tyack (1992) documents historically the waxing and waning popularity of collaborative programs to meet the needs of students and their families. He finds that the past century has demonstrated that school reform, including the provision of health and human services, typically occurs from the top down, with advice from the community being ignored and programs intended for the poor frequently rooted in the wealthiest communities.

Reformers in the 1890s campaigned for medical and dental examinations, school lunches, summer academic programs, recreational activities, and school-based child welfare officers. Many of the health-oriented programs were based on a philosophy of improving the human capital of the nation's children and ensuring equal educational opportunity for them. However, reformers were not convinced of the capacity of parents, especially immigrant parents, to provide for all their children's needs. Sadly enough, social reformers rarely sought input from parents as they designed and implemented these new services. Tyack (1992) notes that, while parents recognized the value of health and medical services provided, some parents found these programs intrusive and sometimes fought these reforms to preserve their own authority and ethnic, religious, or community values. Reactions to these programs varied. Conservatives expressed concern that the school's academic mission would be diluted. Progressive educators lauded the new services and believed that without these services students would drop out of school. Financial officers were apprehensive about identifying sources of money to support the new services. Despite these varied reactions, collaborative school-linked services were entrenched in our nation's public schools by the end of the 1930s.

During the Great Depression, budgets and staffs for school-based services, especially health services, increased (Tyack, 1992). By 1940, almost all cities with populations more than 30,000 had some form of public health service (70% run by the schools, 20% by health departments, and 10% by a collaboration of both). Other services, such as lunches and mental health, did not enjoy such sustained commitment. During the late 1940s, school lunches became the norm, despite conservative fears of excessive state control.

During the 1960s, education was viewed as a vanguard against poverty, and funding for school-based social services was increased. The collaborative programs established after World War II involved a greater degree of community participation. The enlarged role of the community, however, sometimes spawned conflicts among community groups, school officials, and service agencies. Despite these difficulties, Lyndon Johnson's "War on Poverty" had reached millions of children by 1970, and collaborative programs had found a niche in public schools. Collaborative programs received support from influential community groups, did not clash with prevailing instructional approaches; and met some of the needs of poor children.

Collaborative programs were transformed as they became established in the public schools (Tyack, 1992). In an attempt to address truancy, for example, some school social workers became part of the schools' bureaucracy. This change represented a shifting of goals among school social workers. Some social workers began to employ models from community mental health agencies, while others began to work with more privileged clients. To ensure the political viability of new social services, legislators often generalized such programs. Thus, although services were delivered best in wealthy communities with large property tax bases, both the children of the wealthy and the poor became recipients of collaborative interagency services.

During the late 1960s and early 1980s, the role of the schools shifted toward producing students who could succeed in a competitive global marketplace. This shift, combined with significant budget cutbacks, reduced some of the social services provided. Despite the reduction in services, teachers accounted for 70% of all school employees in 1950, but only 52% by 1986, indicating that schools had become multipurpose institutions that looked beyond the academic performance of their students (Tyack, 1992).

Schools have become the location of choice for collaborative programs. Larson et al. (1992) argued that schools are enduring institutions that play a critical role in the life of communities. Having played this role in the past (Tyack, 1992), they can deliver services to children and their families in a less stigmatizing manner.

Not everyone views collaborative school-linked services as a panacea. In the controversial book *Losing Ground*, Charles Murray (1986) argued that government services, including school-linked programs, produced long-term negative consequences for recipients. He maintained, for example, that school-based health clinics contribute to the increase in the number of unmarried pregnant teenagers. Murray cautioned policymakers of the unintended effects that may emerge as government services proliferate.

Solutions other than collaborative school-linked programs have been proposed to reduce risk factors. Kirst (1991b) identified the use of vouchers, tax credits, a negative income tax, and less costly approaches (such as traditional parental care for children) to ameliorate the myriad social ills surrounding students in at-risk contexts.

The Status of Collaborative School-Linked Services

In *Within Our Reach: Breaking the Cycle of Disadvantage*, Lisbeth Schorr (1988) gathered, over the course of 20 years, information from researchers, practitioners, administrators, and public policy analysts supporting the efficacy of collaborative programs. She identified risks that affect the lives of children, including premature birth; poor health and nutrition; child abuse; teenage pregnancy; delinquency; family stress; academic failure; persistent poverty; inaccessible social and health services; and inadequate housing, medical treatment, and schools. She argued that these risks require a societal response, not simply a response from the affected child or family.

Schorr held that there is plenty of information available on both risk factors and effective interventions to guide action. She identified three principles that capture the role and function of collaborations in breaking the cycle of disadvantage: (a) a call for intensive, comprehensive services that address the need of the "whole" child and the community; (b) a recognition that the family should be supported, not displaced, by other social institutions; and (c) a shift in efforts from remediation to early intervention and eventually to prevention. She is one of many advocates calling for collaborative integrated services to supplement the schools' role in society (see Behrman, 1992; Chang, Gardner, Watahara, Brown, & Robles, 1991; Hodgkinson, 1989; Melaville & Blank, 1991; Morrill & Gerry, 1991; National Commission on Children, 1991).

Levy and Copple (1989) documented the groundswell of state-level efforts to develop collaborative integrated services from 1975 to 1989. They record that in that 14-year period, 15 written agreements were prepared; 20 interagency commissions were formed to coordinate state and local agencies; 88 committees, commissions, and task forces were convened; and 63 collaborative programs and projects were implemented. The 24th annual Gallup poll provided further evidence of the popularity of collaborative integrated services: 77% of adults favored using schools as centers to provide health and social welfare services by various government agencies ("Public in Poll," 1992).

Rationale for Collaborative School-Linked Services

Three features of collaborative programs have been identified: joint development of an agreement on common goals and objectives, shared responsibility for the attainment of goals, and shared work to attain goals using the collaborators' expertise (Bruner, 1991). Morrill (1992) asserted that collaboration requires concerted action, not just communication, among committed partners. In this chapter, collaboration is defined as the process of achieving a goal that could not be attained efficiently by an individual or organization acting alone.

Data on the incidence and costs of children's problems show an increase in some problems, such as delinquency and the need for foster care; other problems, such as dropout and teenage pregnancy rates, though decreasing, require higher benefit expenditures and result in reduced student productivity (Larson, Gomby, Shiono, Lewit, & Behrman, 1992). Such evidence supports the need for systemic responses to these problems. Melaville and Blank (1991) characterized the current system of organized services for children as crisis oriented, compartmentalized, disconnected, and decontextualized.

Instrumentalism and incrementalism are dominant political beliefs evidenced in policy toward at-risk children (Kirst & Kelly, 1992). Instrumentalism justifies social interventions by the economic or social returns they produce; as such, it becomes useful for society to invest in school-linked services as a method for meeting the needs of underprivileged families. Incrementalism justifies social interventions only in cases of extreme parental and familial dysfunction. These political beliefs support the use of collaborative school-linked services as a strategy to meet the complex needs of children and their families.

Key Features of Collaborative School-Linked Programs

Collaborative, school-linked services can help guarantee the educational accomplishment of children (Wang, Haertel, & Walberg, 1993) by providing access to medical, psychological, and economic resources that are necessary--but not sufficient--conditions for academic success. Many types of collaborative school-linked programs have been targeted toward the needs of students in at-risk contexts (Levy & Shepardson, 1992; Wang, 1990). Within GOALS 2000, the educational reform package supported by the Clinton administration, a number of projects include schools as centers of community services (U.S. Department of Education, 1993). Current collaborative programs include those directed at parents of young children, teenage parents, pregnant teenagers, dropouts, homeless children, and alcohol and drug abusers.

There is no single model for collaborative school-linked services (Levy & Shepardson, 1992), rather, new programs emerge out of the needs of children and families in local communities. Collaborative school-linked services can be described in terms of their goals, the services offered, the location of services, and the service providers. Another key feature of school-linked programs is whether they provide services alone, curriculum and instruction, or both.

Curriculum-based programs provide knowledge to recipients. Dropout programs, for example, may provide remedial instruction in basic skills, while teenage pregnancy prevention programs may provide information on conception, contraception, and pregnancy. Other curriculum-based collaboratives include programs that teach new mothers and fathers about their children's developmental stages, supply information on the effects of drug use, or provide educational activities for preschool children. Other curriculum-based programs not only present information but teach new skills. One example is the drug prevention program that not only provides knowledge about the effects of drug use, but also teaches refusal and coping skills.

Some collaborative school-linked programs are not curriculum based, but rather extend services to targeted clientele. These types of collaborative programs may provide health and mental health care, recreation, housing, day care, substance abuse treatment, transportation to appointments, and other services. Some programs provide both curriculum and services.

Collaborators in these programs also vary. Early collaborative programs brought teachers and parents together to improve the academic achievement of children. Other collaborative programs involve health care workers, social workers, psychologists, university researchers, business people, community volunteers, and peers.

Levels of Collaboration

Bruner (1991) identified four levels of collaboration that can occur in organizations. The first level describes interagency collaboration at the administrative level, often at top managerial levels in state and local governments. This level of collaboration often results in the creation of task forces, coordinating councils, changes in staff organization, or incentives and job evaluation systems to promote interagency collaboration. The second level of collaboration involves giving incentives to service delivery workers for working jointly with staff in other agencies. The third level of collaboration involves changes within a single agency. At this level, service workers are encouraged to help clients by going beyond procedures and rigidly applied rules. Supervisors are encouraged to interact collegially with service workers and handle individual cases in ways that promote a balance of responsibility and authority. The fourth level of collaboration exists between the client or family and service workers, in which they work jointly to identify needs and set goals in order to increase the self-sufficiency of the client.

Identifying Current Programs

This chapter summarizes evidence presented in 44 sources describing one or more collaborative school-linked programs. The literature search, selection of criteria, and coding procedures are described below.

The Literature Search

A search was made of practitioner and research journals in education, public health, public policy, and social services. A key article, "Evaluation of School-Linked Services" (Gomby & Larson, 1992), identified 16 current collaborative programs. In addition, a search of the Educational Resource Information Clearinghouse (ERIC) and the 1992 annual conference program of the American Educational Research Association (AERA) was conducted and relevant papers were secured. Finally, 45 different organizations were contacted, including state and local agencies as well as project staffs. These efforts resulted in the identification of fugitive documents that were available only from the agency sources and not yet available in libraries.

Selection of Sources

A few basic criteria were used for the selection of sources for this study. All sources had to present results from programs involving school-based collaboration. In any single program, the school could be involved as the provider of academic services, the central location where families access social and health services, or the goal of the program (that is, readiness programs prepare children for success in school). The programs selected involved students from preschool to high school. Collaboration or integration among institutions and agencies was a primary aspect of programs selected. All the programs were designed to impact the lives of children or their families; were implemented in the past decade; and contained an outcome-based evaluation or some measurement of short-term, intermediate, or long-term results. Some evaluations contained process or implementation data, but process data were not required for a study or evaluation to be included.

Coding Procedures

The types of sources selected included narrative reviews, interventions, program evaluations, meta-analyses, and correlational studies. All were published since 1983. Ten features were coded for each source, including (1) type of source (for example, narrative review, program evaluation); (2) sample size, referring to the total number of clients or program sites (for meta-analyses and quantitative syntheses, the sample size refers to the number of studies analyzed); (3) at-risk contexts served by each program; (4) program goals; (5) outcomes; (6) collaborators or partners in the program; (7) type of evidence reported (that is, numerical--including frequencies, percentages, means, and standard deviations; statistical--including hypothesis and significance testing; or qualitative--including anecdotes, client statements, or administrator perceptions); (8) data collection tools (that is, school records, interviews, performance tests, achievement tests); (9) nature of cost data (that is, none, minimal, and cost-effectiveness or cost-benefit analysis); and (10) curriculum-based versus services orientation or both.

The 44 sources identified were then divided into 6 categories: parent education and school readiness; teen pregnancy prevention and parenting; dropout prevention; chemical dependency and prevention; integrated services (programs designed to integrate services from a variety of different agencies and address multiple risk factors), and parent involvement. A list of bibliographic citations for each of the 44 sources synthesized is available from the Temple University Center for Research in Human Development and Education.

Key Features of Six Program Areas

The 44 sources for the present review were organized under six programmatic areas. For each area, the at-risk context, goals, collaborators, and curriculum-based versus service orientation are reported in Table 10.1.

Table 10.1
Key Features of Six Program Areas

Program Area	At-Risk Context	Goals	Collaborators	Curriculum Versus Service Orientation
Parent Education and School Readiness (8 sources; 18 programs reviewed)	Uneducated, low-income families with young children often in urban areas; teenage parents.	Parental competencies; family literacy; children's academic achievement; provision of health and social services.	Social and health care workers, schools, private foundations.	Both--(a) curriculum includes child development, child-rearing practices, and parental self-help; (b) services include home visits by nurses and social workers, transportation to appointments, counseling, health screenings.
Teen Pregnancy Prevention and Parenting (5 sources; 7 programs reviewed)	First-time, unmarried, low-income, pregnant teenagers; a few designed for ethnic minorities in urban areas.	Pregnancy prevention: provide information about birth control, sex, and pregnancy to prevent pregnancy; provide contraceptives. Teenage parenting: provide knowledge about pregnancy, birth control, child development, and parenting skills; promote completion of mother's high school education; promote employability and job skills for mothers.	Schools, home nurses, Planned Parenthood; other health and human service agencies; obstetricians, midwives, pediatricians, and nutritionists; university medical schools.	Pregnancy prevention programs: Both--(a) curriculum includes information on birth control, sexuality, and family life education; (b) services include counseling, medical exams, and contraceptives. Teenage parenting: Both--(a) curriculum includes information on birth control, sexuality, child care, and health education, prenatal care, job training; (b) services include prenatal care, transit to appointments, nurse home visitations, parenting programs.

Table 10.1 (cont'd)
Key Features of Six Program Areas

Program Area	At-Risk Context	Goals	Collaborators	Curriculum Versus Service Orientation
Dropout Prevention (8 sources; 25 programs reviewed)	High school students often in urban areas, with histories of high absenteeism and course failure; also students not able to conform to school expectations; sometimes students involved in criminal activity, chemical dependency, or teenage pregnancy.	Increase student attendance; reduce dropping out; identify and contact truant students; increase students' academic performance; increase probability of students' attending college or entering job market.	Schools; parents; juvenile justice departments; businesses; social services; and occasionally universities and colleges.	Both--(a) curriculum includes remedial basic skills and vocational educational programs; (b) services include counseling, mentoring, health services, phone calls for absenteeism, preparation for GED, and coordination of Job Training Partnerships Act.
Chemical Dependency Abuse and Prevention (8 sources; 171 programs reviewed)	All students; some designed especially for urban minorities; Native Americans and children of alcoholics.	Reduce consumption of alcohol and drugs; increase knowledge about alcohol and drugs; promote coping skills against pressure to abuse substances; teach responsible drinking habits; develop self-esteem.	Peers; schools; community and social agencies; media; counselors; health care workers; police and businesses.	Both--(a) curriculum includes information on alcohol and drugs; social and decision-making skills; (b) services include peer and other counseling, alcohol- and drug-free activities, and support groups.

Table 10.1 (cont'd)
Key Features of Six Program Areas

Program Area	At-Risk Context	Goals	Collaborators	Curriculum Versus Service Orientation
Integrated Services (6 sources; 6 programs reviewed)	Wide range urban and rural students; delinquent children; children from dysfunctional families; urban minorities; low-achieving youth.	Coordinate services (often coordinating services is an intermediate goal toward ends such as lowering dropout rates); often a single program encompasses multiple goals.	Schools; universities; businesses; state and local governments; foundations and nonprofit agencies; health and mental health care providers; community and religious institutions; parents; peers.	Both--(a) curriculum develops a variety of knowledge and skills; (b) services include vocational counseling, health care, health and mental health, services, and case management.
Parent Involvement (8 sources; over 240 programs reviewed)	Families of children from preschool to high school; frequently urban, economically, and socially disadvantaged families.	Foster greater parental concern for children's educational achievement; improve academic achievement; encourage greater parent involvement in children's education; create more intellectually stimulating home environment; foster close family relationships.	Schools; parents; mental health providers; businesses; media; universities.	Primarily curriculum--parenting skills; child development information.

At-Risk Contexts. Many of the collaborative school-linked programs are targeted for urban, low-achieving, economically and socially disadvantaged children and youth and their families. However, the Dropout Prevention, Teen Pregnancy, and Chemical Dependency program areas are targeted for all students.

Goals. Parent Education and School Readiness, Teen Pregnancy Prevention and Parenting, Dropout Prevention, and Parent Involvement programs all focus resources on improving students' academic achievement. In addition, many of these programs have goals that focus on parental competencies, family literacy, and child development and the provision of mental health and health services. Selected programs such as Teen Pregnancy and Chemical Dependency have particular goals associated with the program's special emphasis (for example, information on birth control; providing knowledge about alcohol and drugs).

Collaborators. Across all program areas, the most typical collaborators include schools, families, and social and health care workers. A supportive but less central role has been played by universities, private foundations, religious institutions, the media, law enforcement, and the business community. In the area of Chemical Dependency Abuse and Prevention, peers have played a key role in modeling refusal and coping skills, and in distributing current information on alcohol and drug abuse and prevention.

Curriculum Versus Service Orientation. In most collaborative school-linked programs, both curriculum and services are offered as part of the programmatic intervention. Parent Involvement programs are the exception, relying primarily on curricular interventions. The curriculum presented in most collaborative programs provides knowledge and new skills in the program's area of emphasis. Services most typically involve health care, transportation to appointments, and counseling.

Effectiveness of Collaborative, School-Linked Programs

Each of the 44 sources identified in the literature search was categorized into one of the six program areas, coded, and its outcomes analyzed. A total of 176 outcomes were identified and examined across the 6 program areas. Of these, 140 (or 80%) indicated that the interventions produced positive results; 29 (or 16%) reported no evidence of change; and 7 (or 4%) indicated that the interventions produced negative results. These counts provide information only on the direction of the outcomes, not the magnitude of the program effects. Thus, both small, insignificant improvements and large, statistically significant effects are all counted as positive results, regardless of the size of the improvements. Nevertheless, these overwhelmingly positive results point to the success of programs that promote collaborative school-linked services. The total number of outcomes and percentage of positive outcomes within each program are presented below on Table 10.2.

The percentage of positive outcomes ranged from 95% in Integrated Services to 68% in Parent Involvement programs. Even 68% is strong testimony to the efficacy of collaborative school-linked programs.

Table 10.2
Positive Outcomes by Program Area

Programmatic Area	Total No. Outcomes	No. Positive Outcomes (Pct.)
Parent Education and School Readiness	48	38 (79%)
Pregnancy Prevention and Parenting	6	5 (83%)
Dropout Prevention	36	26 (72%)
Chemical Dependency Abuse and Prevention	27	21 (78%)
Integrated Services	37	35 (95%)
Parent Involvement	22	15 (68%)

Effects on Program Participants' Cognition, Affect, and Behavior

The five types of outcomes commonly utilized in the research studies and evaluations of these collaborative, school-linked programs are: attendance; achievement test scores, grade point average, and academic grades; reduced behavioral problems; self-esteem; and dropout rates.

In Parent Education and School Readiness programs there were positive outcomes reported for attendance (N=2), academic performance (N=6), reduced behavioral problems (N=5), self-esteem (N=2), and dropout rates (N=1). No negative outcomes were reported.

Results for Pregnancy Prevention and Parenting programs were very sparse. Although these programs attended, appropriately so, to reductions in pregnancy rates and increased knowledge of sexuality and child-rearing practices, they did not report the impact of their programs on most of the other common outcomes. They only reported a positive outcome on dropout rates (N=1). No negative outcomes were reported.

Dropout Prevention programs reported a positive impact of their programs on three of the outcomes: attendance (N=6), academic performance (N=7), and self-esteem (N=5). One negative outcome was reported (academic performance; N=1).

Chemical Dependency Abuse and Prevention programs also reported positive outcomes for attendance (N=2), academic performance (N=2), reduced behavior problems (N=2), and self-esteem (N=1). However, there were few instances of each type of outcome. Only one negative outcome was reported (self-esteem; N=1).

Studies of integrated service programs have employed research and evaluation designs that captured student performance using a wide range of outcomes. Integrated service programs reported positive outcomes in attendance (N=4), academic performance (N=8), reduced behavior problems (N=6), self-esteem N=2), and dropout rates (N=6). One negative outcome was reported (attendance; N=1).

Of the five most common outcomes reported (attendance, academic performance, reduced behavioral problems, self-esteem, and dropout rates), Parent Involvement programs have reported primarily academic outcomes. They document improved achievement outcomes (N=6) and attendance (N=1). No negative outcomes were reported.

Of all the documents measured by these collaborative programs, the most frequently examined was the academic performance of participants and the least examined was dropout rates. The total number of outcomes and percentage of positive outcomes by outcome types are presented below on Table 10.3:

Table 10.3
Positive Outcomes by Outcome Types

Type of Outcome	Total No. Outcomes	No. Positive Outcomes (Pct.)
Attendance	18	15 (83%)
Academic Performance (Achievement, GPA, Academic Grades)	36	29 (81%)
Reduced Behavior Problems	17	13 (76%)
Self-Esteem	12	10 (83%)
Dropouts	9	8 (89%)

Attainment of Program Goals

In addition to the programs' impact on students' cognitions, affect, and behaviors, each program was designed to attain specific goals, such as delay of first usage of drugs and alcohol, or reduction of pregnancy rates. The success of each of the programmatic areas in attaining its particular goals is presented in Table 10.4 below.

These results indicate that collaborative programs largely achieve the goals they set forth. The effectiveness of each programmatic area is described below.

Parent Education and School Readiness. Eight sources were examined in this program area. These sources reviewed results from 18 programs. Results from the programs indicated program-favoring effects on maternal behaviors and mother-child interactions, while the effects on infant development were more modest. Program-favoring effects were also documented by an increase in community resources and parental participation in job training and employment. However, there were more mixed effects on parental teaching skills; some programs were more successful than others, depending on the amount of time spent on maternal interactions and other specific behaviors. Overall, the programs demonstrated success in influencing the outcome domains closest to their emphases, for example, children's readiness for school, parenting skills, maternal development, and use of community resources. The long-term effects of these programs are more equivocal. Earlier evaluations of preschool programs have provided

Table 10.4
Attainment of Goals by Program Area

Programmatic Area	Total No. Outcomes	No. Positive Outcomes (Pct.)
Parent Education and School Readiness	30	22 (73%)
Pregnancy Prevention and Parenting	5	4 (80%)
Dropout Prevention	11	8 (73%)
Chemical Dependency Abuse and Prevention	19	14 (74%)
Integrated Services	9	9 (100%)
Parent Involvement	10	8 (80%)

evidence that academic advantages fade over time but social and behavioral changes, such as incidence of grade retention, special education placement, and reduction of dropout rates, support the long-term effectiveness of parent education and school readiness programs (Lazar, Darlington, Murray, Royce, & Snipper, 1982).

Teen Pregnancy Prevention and Parenting. Five sources were identified describing results from seven collaborative programs. Results documented that clients' knowledge about pregnancy, reproduction, and birth control increased in all seven programs. One program showed evidence of a decreased willingness to engage in sexual activity at a young age. Generally, however, client attitudes toward the risk of additional pregnancies were not studied. Of the three programs that examined school retention of pregnant teenagers, all showed positive effects for immediate retention after the child's birth. Only one program examined the retention of mothers 46 months after delivery. Forty-six months after delivery, client dropout rate was comparable to pregnant teenagers who had not been enrolled in the program. Some increased concern about employment and decreased job turnover among the teenage parents were also documented. Two of the five programs for teenage parents that examined pregnancy rates showed a decline. Results from the two pregnancy prevention programs documented delayed age of first intercourse, decreased pregnancy rates, and increased use of birth control clinics and contraceptives.

Dropout Prevention. The overall national dropout rate has declined and, in the early 1990s, was at an all-time low (Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). In contrast, however, dropout rates in urban areas have remained high, focusing attention on the need for innovative programs. In this programmatic area, 8 sources were identified and 25 collaborative programs were described.

All but one of the programs increased students' attendance rates, and most increased students' grade point averages and the number of credits earned. Of the studies that examined dropout rates, a decrease was noted. Only one program assessed the longitudinal effects of a prevention program on dropout rates, and it demonstrated a continuous decrease in dropout rates. Behavioral indices across all programs revealed weak effects, including no evidence of decreased suspensions and disciplinary referrals and low graduation rates. In addition, participating students did not have more definite graduation plans as a result of the program intervention. The study by Wehlage et al. (1989) explored the psychological effects of 14 dropout prevention programs. Their results revealed modest positive effects on social bonding, sociocentric reasoning, self-esteem, locus of control, and academic self-concept.

Chemical Dependency Abuse and Prevention. Nine alcohol and drug abuse sources were reviewed and they included results from 171 programs; results from a meta-analysis contributed data from 143 research studies and evaluations.

Students' use of drugs decreases as a result of participating in chemical dependency programs. The effectiveness of these programs on alcohol use is less clear. It appears that the most effective alcohol and drug prevention programs are those that deliver knowledge about the effects of alcohol and drugs to students in combination with refusal and coping skills.

Based on results of a meta-analysis of 143 programs, Tobler (1986) documents the superiority of chemical dependency programs that involve peers as collaborators. The superior effects of peer programs reflect the special influence peers have on one another's behavior and the value of specific skills training. Peer programs are successful at modifying student behavior regardless of the drug being used. Chemical dependency programs that use peers as collaborators are likely to decrease student drug use--or at lease decrease the likelihood that students will try new drugs.

Integrated Services. The six sources in this programmatic area reviewed results from six collaborative programs. Outcomes measured by the programs were diverse; a few used institutional change as evidence of program success, but most relied on student outcomes including grades, attendance, attitudes, and noncompliant behavior. Other outcomes included degree of parental involvement, teacher attitudes, number of services provided to clients, and number of referrals.

Among the types of institutional change that have been documented are: the linking of existing institutions, joint planning and budgeting sessions, creating a management information system, hiring of case managers, and the forming of business/school compacts.

Based on results presented in these programs, integrated services programs have positive effects on students' achievement tests, grades, dropout rates, and attendance. Of utmost importance is the finding that all of the six programs show large numbers of services being provided to children and families in at-risk circumstances. A second important outcome, which is rarely reported, is the effect of these programs on teachers. In the Jewish Family and Children's Services (1991) project, teachers reported that their knowledge of child development and sense of responsibility toward the children increased with program implementation. The evaluation conducted by Philliber Research Associates (1991), moreover, suggested that children who received intensive case management exhibited higher academic achievement and better work habits despite increased absenteeism.

Parent Involvement. The eight sources reviewed in this programmatic area represent results from more than 240 parent involvement programs. Two of the eight sources were meta-analyses: Graue, Weinstein, and Walberg (1983) summarized results from 29 programs and White, Taylor, and Moss (1992) from over 200 programs. The remaining six sources reviewed included four program evaluations, one correlational research study, and one intervention study.

Results from the studies suggest that parent involvement programs have weak to moderate positive effects on improving children's academic performance. Although these programs improved parental involvement in children's education, their impact on academic achievement was mixed.

The two meta-analyses provide conflicting evidence about the effects of parent involvement programs. Graue et al. (1983) found that programs to improve parent involvement and home environments in elementary school have large effects on children's academic learning. On the other hand, employing results from early intervention programs for preschoolers, White et al. (1992) concluded that "average effect sizes of treatment versus no-treatment studies in which parents are involved are about the same as the average effect sizes of treatment versus no-treatment studies in which parents are not involved" (p. 118). Based on these findings, they concluded that there is no basis for parent involvement programs to claim cost effectiveness.

Evaluating Collaborative School-Linked Programs

Many studies of collaborative school-linked programs suffer from high attrition, control groups that are not comparable, and a wide range of unique outcomes, some of which are based on measures of unknown reliability and validity. Little implementation of process data is reported. In addition, many evaluation reports do not document the magnitude of program effects nor include information on costs, making it difficult to judge the practical significance of the programs.

Oftentimes collaborative school-linked programs make use of varied (and sometimes conflicting) goals, assumptions, definitions, procedures, and analytic tools. Additionally, studies of these programs often are designed by teams of researchers from several disciplines and social and health care agencies which hold a service delivery perspective.

Innovative programs are designed to achieve specific outcomes. Systematic evaluation of the program's implementation is central to the validation and improvement of the program. The traditional treatment/yield paradigm and classic pre- and posttest control group experimental designs, while useful from a conclusion-oriented evaluation perspective, are not sufficient in determining whether a program has been successfully implemented. Evaluations must include documentation of: What elements of the program need to be implemented (and at what levels) to make the program work? What are the critical features of the programs that should be observed to validate program implementation? What barriers interfere with the successful implementation of the program?

Evaluating the collaborativeness of these programs posts major challenge. There are few direct measures of collaborativeness. Should it be measured by linkages among institutions, by the accessibility of services to clients, or by the satisfaction of the collaborators?

The evaluation of collaborative school-linked programs requires identifying a wide range of client outcomes. Not only should evaluators be concerned with process and implementation data, but also with the measurement of improvement in student academic achievement, school attendance, graduation rates, decreased pregnancy rates, coping skills, reduced behavioral problems, and other cognitive, affective, and behavioral outcomes. Most importantly, collaborative programs need to document whether their clients are able to readily access more community resources.

As with most reform efforts with broad agendas, collaborative school-linked programs are faced with many, often competing, demands. Strategic planning, responsible implementation, and, above all, practical wisdom are required as these innovative programs unfold.

CONCLUSION

Five conclusions are drawn from the current review of collaborative, school-linked programs.

- The challenges that face children, youth, and families in at-risk contexts are generated from a mix of cultural, economic, political, and health problems. The complexity of these conditions defies simple solutions. To solve these problems resources must be gathered from the community--public and private agencies, local and state health and human services departments, and businesses and religious institutions--and coordinated with the resources available in schools;

- Narrow plans that reform a school's instructional program alone will not solve these problems. Policymakers, practitioners, and the public must be made aware of the importance of integrating community resources with the educational resources available in schools;

- Empirical results from current collaborative school-linked programs are positive, but have to be regarded cautiously. Many of these programs have not been rigorously evaluated. Evaluation and research studies of these programs often contain inadequate descriptions of the program components, use a limited number of outcomes, have few direct measures of collaboration, do not collect process or implementation data, do not have comparable control groups, have high rates of attrition, and report little data on program costs. The studies of collaborative school-linked services that are available are those that are published. Given that published evaluations and studies generally report positive results, the results reported in this chapter may be biased in a positive direction. Further research and more rigorous evaluation is needed to arrive at general policy conclusions;

- Better implementation data are needed to validate the effectiveness of these programs. Evaluation reports must include documentation of: linkages among agencies, the changing roles of administrators in schools and service agencies as they collaborate, the changing role of staff, and the establishment of a management information system; and

- There is little communication among researchers, policy analysts, policymakers, and practitioners concerning the growing knowledge base on collaborative school-linked services. Operational strategies and tactics need to be identified to support collaborative school-linked services. These strategies should link district administrators, middle management, principals, teachers, and service delivery agencies so that key information is accessible to all collaborators.

Collaborative, school-linked services are becoming a common feature of the educational reform landscape. Although the programs demonstrate positive outcomes, the results must be treated with guarded optimism until results from more rigorous evaluation and research studies are available.

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Eleven:

Coordinated Services for Children: Designing Arks for Storms and Seas Unknown

Robert L. Crowson and William L. Boyd

Introduction

In today's mood of crisis in American education, impatient business leaders and reformers applaud the "Noah Principle" applied to education by Louis Gerstner, the Chief Executive Officer of R.J.R. Nabisco: "No more prizes for predicting rain. Prizes only for building arks." Action and solutions, not analysis, are what is needed, in this view. And, indeed, in the case of coordinated services for children, all manner of "arks" are being launched into poorly understood weather and waters. Not surprisingly, this sense of "damn the torpedoes, full speed ahead" has exacted a price. A number of coordinated ventures have foundered on the shoals of the fragmented terrain and competing turfs of interagency relationships (see especially Cohen, 1991d).

Happily, a new wave of more sophisticated coordinated services efforts is now underway. Informed by an expanding national network of advocates and practitioners, the new wave is benefiting from a growing base of practical savvy about "what works" and "what doesn't" (see especially the collection edited by Behrman, 1992). As a consequence, collaborative ventures are less likely now to repeat some of the obvious mistakes of the past. Nevertheless, as Behrman (1992, p. 7) and his colleagues recognize, though quite promising, the movement "is in an early stage and . . . much about its complexities and potential for effectiveness remains unknown."

A particular gap in our knowledge is the paucity of theoretical analysis about the deeper organizational issues implicated in collaborative ventures. As we shall argue, this is more than a mere academic concern because the deeper organizational issues have very telling practical implications. Thus, as an aid to "modern-day Noahs," this article explores the murky waters that coordinated ventures must navigate. To say the least, it is a region characterized by submerged and subterranean labyrinths of disconnected and often competing organizations, incentives, and allegiances.

Developments in educational reform and coordinated services flow from an intersection of movements in a new, many-sided effort to strengthen community connections for urban schools. To begin with, an unprecedented and, indeed, international movement toward enhanced parental involvement in school decision-making is underway (Beattie, 1985). Simultaneously, there is a far-reaching effort to create a more effective instructional partnership between educators and parents in urban schooling (Johnson & Ransom, 1983; Seeley, 1985). Similarly, the relationship between the urban public school and their surrounding community is undergoing a redefinition. Schools are being asked to become community-responsive (indeed, even community-creating) institutions, in place of a community-buffering stance of years past (Crowson, 1992). Finally, city schools increasingly are engaged in new service-coordination experiments, in a larger brokering role between school and community than ever before (Kirst, 1991; Kirst & McLaughlin, 1990).

All four of the above movements (parental involvement in school governance, instructional partnerships, school-to-community "outreach," and children's services coordination) are interconnected. Together, they are increasingly viewed as critical elements in the overall improvement of education, particularly in urban areas (Jehl & Kirst, 1992). Nationwide, community-connections experimentation is decidedly on the upswing--with a recent proliferation of ventures in parent/community control, family assistance, parent-education, Comer schools, Levin's "accelerated" schools, and service-integration. A recessionary "budget ax" in many states in 1991 and FY 1992 has hurt children's services programs, but these efforts still retain momentum most places (Cohen, 1991, November 13).

Of course, these developments do not comprise the "whole" of urban school reform, for simultaneously there also have been major efforts in a larger framework of school restructuring--toward such ventures as teacher-empowerment, organizational decentralization, consumer choice, cultural-diversity curricula, new assessments of student learning, etc. Significantly, this diverse menu of reforms creates possibilities for restructuring initiatives to work at cross-purposes, i.e., for efforts such as coordinated services and teacher-empowerment to collide "head-on" at the building level, if not very carefully thought-through.

But, while creative experimentation, innovation, and reform are occurring in urban education, the array of organizational and administrative issues accompanying efforts to strengthen community, school, and social/health agency connections is still underexplored. However, a suggestive literature already attests to the powerful constraints which impede urban school restructuring and particularly any alteration of school-community relations. Studies abound illustrating institutional "deficiencies," incentive-structure problems, attitudinal barriers to change, bureaucratic intractability, and a politics of non-responsiveness. Whatever the ultimate promise of community-connections experimentation, the full potential is unlikely to be realized without a better theoretical and practical understanding of the organizational, administrative, and implementation issues associated with such ventures. What conditions and governance arrangements foster or impede coordination, integration, and community connections? What incentives and disincentives operate? What are the dynamics of interorganizational collaboration?

Background: The Children's Services Phenomenon

Few ideas have "caught on" in public education as rapidly or as widely as the notion that public schools and other social and health agencies should collaborate to provide more effective services for children. The central concept, of course, is by no means new. Antecedents exist in the turn-of-the-century "Gary Plan" of Willard Wirt, in the long support of community-schooling by Michigan's Mott Foundation, and in various "Great Society" interventions of the 1960s (Tyack, 1992).The most common models of service-coordination under consideration today are a school-based approach (with the school as the dominant player), a school-linked strategy (with the school as a collegial partner), and a community-based approach (with the school as a lesser player). Of these approaches, the school-linked model appears most effective (see, Behrman, 1992).

An evaluation of some 1960s school-based, service-coordination experiments identified a set of key administrative issues critical to program success (Syracuse Policy Memorandum SYR 71-5, 1971). These key issues involved professional isolation, "turf" considerations, bureaucratic immobility, legal and procedural forms, facilities and communication barriers, and the scope of community participation. Twenty years later, Michael Kirst (1991) warned of continued, unresolved administrative issues in coordinated children's service experimentation. Just as twenty years earlier, these modern-day administrative concerns stem from similar problems: splintered professional preparation, state legal and procedural restrictions, "turf" battles, information system weaknesses, leadership gaps, the "politics" of coordination (e.g., the "coordination game"), and school-to-community credibility (Kirst, 1991).

Advocates of service coordination know about the difficulties of professional and bureaucratic cooperation (see Cunningham, 1990). Indeed, most students of educational administration are aware of a long, discouraging literature on the constraints impeding the coordination of public-sector services (see Townsend, 1980; Wilson, 1989). Nevertheless, experts today agree that we must overcome these constraints because the conditions of life and educational development for children (and particularly poor children) are in a deep state of crisis. Hodgkinson (1991) reports, for example, that

- On any given night between 50,000 and 200,000 children have no home.
- One-fourth of pregnant mothers receive no physical care of any sort during the first crucial trimester of pregnancy.
- Twenty percent of America's preschool children lack vaccinations against polio.
- In 1987, child protection agencies received 22 million reports of child abuse or neglect--triple the number received in 1976 (Hodgkinson, 1991).

"Social indicators" (e.g., child-abuse, delinquency, health, income support, housing statistics) reveal a declining access to support services for many children (Kirst, 1989). For increasing numbers of children, the continuing breakdown of the family is exacerbated by a deterioration in the delivery of needed child-development resources (e.g., education and adequate nutrition, clothing, health care, housing, safety, adult caring, etc.). Furthermore, the fragmented "patchwork" of delivery systems for poor children seldom meets "whole child" needs. As Kirst and McLaughlin (1990) conclude, at this time of crisis "business as usual in children's services is not good enough."

Some Intellectual Perspectives and Assumptions

The sense of crisis in child assistance, and the accompanying press for children's service coordination spring from three major intellectual perspectives.

The New Ecology of Schooling. The first is a renewed appreciation of the ecological relationship between schools, families, and neighborhoods (Andrews, 1987). Although a renewed interest, the ecological perspective goes back to the very beginnings of modern inquiry into urban lifeways. The classic, turn-of-the-century work of Robert Park, Louis Wirth, and others (linked with what came to be known as the "Chicago School of Sociology") established a still-vibrant perspective upon city environmental forces in interaction with human behaviors (see, Karp, Stone & Yoels, 1991). This early frame-of-reference tended toward the negative, finding in the city environment proclivities toward a destruction of humanity and a pathology of social organizations. But the Chicago School also generated an important sense of the multidimensionality and the interactions and interdependencies of city life. Each varied part of the city connects to a larger whole in the individual lives of its many inhabitants.

Seen as dangerously destructive, but simultaneously interdependent, the city became viewed as a vital laboratory for the social service interventions of Jane Addams, and others connected with the settlement house movement (Addams, 1892). Today's rediscovery of urban ecology no longer sees the city as an "evil" force. But it does note that school, community, and family remain intertwined, that social service interventions can be important in the urban milieu, and that either continuities or discontinuities of care for children can result.

Classroom teachers have long known that hungry children (and inadequately clothed and unhealthy children) are handicapped learners. Thus, many poverty-area schools began taking steps years ago to provide needy children breakfasts as well as other amenities (e.g., winter coats, boots, free inoculation services). More recently, recognition has grown of the important ecological relationships between schools and neighborhood housing, economic development, transportation, library services, health services, and recreation programs (see Cohen, 1992). Programs are needed, says Schorr (1989), that are "open-eyed" to the wide array of needs of at-risk populations in a family and community context. One realization along these lines is that public services such as park and recreation offerings are just as educative and psychologically important to a child's development as the local school (see particularly, Littell & Wynn, 1989). Unfortunately, there are seldom concerted efforts to link these human services into what Fantini (1983) called "a network of learning environments."

An Investment Perspective. A second intellectual backdrop to the coordinated services movement builds upon the notion of education as an investment in children. Parents have long viewed schooling as an invaluable hedge against an uncertain future for their offspring; they tend to view their own sacrifices for their children as necessary investments toward a "payoff" of future employment, stability, and happiness. At the societal level, the nation similarly recognizes that its investment in public education is necessary to the "human capital" required to sustain the nation's economic growth, productivity, and technological development. The threats represented by Sputnik and the more recent Japanese challenge to American industries have reinforced in the nation's psyche the importance of a national (even a national defense) interest in school system quality. At the same time, many also recognize the accumulating public burdens that accompany a failure to invest adequately in children, families, neighborhoods, and schools (see, Schorr, 1989).

Although the construct is not new, the investment perspective is certainly enriched and extended in the emerging coordinated children's services literature. There is, first, a concern expressed well by Willis Hawley (1990). He notes that an investment in educational services for at-risk children may yield few benefits if not matched by complementary investments in improved housing, health, nutrition, recreation, family stability, and community development services. Similarly, little may be gained if an investment in the remediation of early-in-life barriers to children's education (e.g., low birth weight, infant malnutrition) is not accompanied by a longitudinal follow-up with continuing intervention "against the forces that will later impede their cognitive and social development" (Hawley, 1990). A second, modern-day extension of the investment construct emphasizes "partnerships" between schools and other organizations (often corporations or universities). The recognition here is that investments of resources (particularly "human talent" resources) far beyond the public tax dollar are now required for school-improvement in urban communities. City schools are becoming increasingly sophisticated in tapping the range of potential "investors" available to them, including an upswing in the contributions of volunteers to the work of the schools (see Tangri & Moles, 1987).

A third extension of the investment perspective is the most interesting of all. While the school and the child have long been regarded as objects of investment, this added interpretation now views the school as an important investor in its own right. This new perspective connects with James Coleman's (1985, 1987, 1988) notion that schools are more effective for children from strong family backgrounds. Consequently, it makes good sense for schools in some neighborhoods to reach out into the community in an attempt to strengthen the "social capital" available to children in that community. By "social capital," Coleman (1987), means "the norms, the social networks, and the relationships between adults and children that are of value for the child's growing up." Thus, the interests and goals of the school are advanced if the school itself invests heavily in the creation of a sense of community and works hard to develop productive linkages with and among families. This is particularly important because, as Weir (1992) notes, "In many poor neighborhoods, public schools are among the few surviving community institutions."

A Child-Development Emphasis. "We cannot separate care and education," argues Sharon Kagan (1989). Nevertheless, public schools find it hard to merge these two responsibilities. The encouragement of learning and the act of teaching are such difficult, time-consuming responsibilities, in and of themselves, that any enlargement of educator roles toward further "caring" becomes more than most professionals can bear. The public schools do now provide an array of child-care services--including meals, nurses, counselors, school crossing-guards, and occasionally warm clothing, shoes, etc. Moreover, classroom teachers are more sensitive today to any evidence of a serious lack-of-care (particularly child-abuse and child-neglect) in their students' home lives, and are more likely to take legal action to protect children from abuse, in part because of laws making them legally responsible to report suspected abuse. Nevertheless, health and social service professionals, and even the guidance staff itself, are often relegated to a position at the periphery of schooling. Rarely are they considered an integral part of the teaching-learning nexus.

The influential work of James Comer (1980, 1984, 1986, 1987, 1988) emphasizes the notion of a necessary linkage between care and education in a developmental sense. Comer (1984) argues that "critical developmental pathways" in the lives of children, rooted in home and family backgrounds, need to be merged effectively with developmental reinforcers in the school. Successful development cuts across home and school; does not separate academic from social, moral, and emotional development; and ideally incorporates all of the resources of the school (including parents) into a common blending of care and education (Comer, 1980). Developmental processes are strongly interrelated (see, Peterson & Stemmler, 1991). The services of the school (educational, caring, and developmental) and the services of the family/community (also educational, caring, and developmental) should be constructed to communicate "mutually reinforcing messages" (Ianni, 1989) to children--in place of the disharmony and the "discontinuities" between home and school that so often affect urban children (Ogbu, 1974, 1988).

Exemplars: Some Programs and Service Alternatives

Service-coordination efforts are diverse. In some states efforts toward service-coordination have remained state-level initiatives, with interagency councils or cabinets working systematically to blend programmatic initiatives for the state's health and human services departments. Not uncommonly, as in Delaware, the state's initiative includes encouraging the parallel formation of local interagency councils, with the notion of extending the reach of service coordination vertically from state to locality. In other states, as in New York's Community Schools Program (1990), state initiatives have encouraged local service-coordination, but without a parallel development among the state agencies themselves. In New York's case, individual schools and subdistricts of city schools receive special programmatic grants to use the schools as nuclei for education, health, nutritional, and other supporting social services to students and families.

Alternatively, some of the service-coordination press has been locally initiated, with little or no state-level participation. An example is the effort of the Mayor's Office in Philadelphia to establish a number of "Family Services Districts," providing selected inner-city communities with neighborhood-based, multi-service centers. Government (whether state or locality) is not always the chief player in service-coordination. Foundations, professional and business associations, and universities also have been extremely active in this arena of activity. The Kellogg Foundation, for example, provided a major, multi-year grant to the Chicago campus of the University of Illinois to support the University's partnership with four inner-city schools in a merger of educational, health, parent-education, and family/community support services.

The scope of service-coordination varies as widely as its administrative base. One of the early national (multi-site) initiatives, Cities in Schools, Inc., has focused upon a comprehensive approach to dropout prevention through coordinated health, educational, and social services for inner-city adolescents (see, "Connecting the Disconnected," 1989). Similarly, James Comer's model of inner-city schooling works toward school improvement by linking the classroom, health services, guidance, parent-participation, and family-assistance. Less comprehensive initiatives have focused upon work training and employment, drug prevention, parent-education, and school-based health clinics. Although many of the new initiatives of city schools fall short of full service-coordination, the trend in urban education is toward a service-provision role for the school far beyond its educative tradition. An innovative example is found in the 1991 decision by the Little Rock, Arkansas school system to pay insurance premiums toward drug treatments for students needing such assistance (New York Times, 1991).

The broad appeal, rapid dissemination, and "bandwagon" flavor of the coordinated-services concept are shown in the widening array of proposals and agencies with plans, recommendations, and project descriptions. Since 1989, major reports/proposals have been produced by the National Association of State Boards of Education (Levy, 1990), the National Governors Association (1990), the Council of Chief State School Officers (1989), the Council of Great City Schools, the Carnegie Council on Adolescent Development (1989), and the Institute for Responsive Education (1990). Paralleling these reports, experimentation throughout the nation has been growing at a pace that makes the "tracking" of developments difficult--despite the help of newly-established conferences and computerized directories. The following examples of a few of the local initiatives provide some sense of the scope and variety of projects and experiments:

- The State of New York inaugurated a Community Schools Program in 1987, providing resources to individual schools which broker health, nutritional, and social services for children and families; which establish productive linkages with other agencies (e.g., community-based organizations, businesses, churches, higher education); which involve parents actively; and which serve as a site for a variety of services (e.g., cultural, recreational).

  Some twenty schools statewide were funded under the program by 1989-90, ranging from (a) early-interventions with families; (b) service as an "umbrella" for a range of offerings to the community (e.g., tutoring, vision testing, counseling recreation); (c) an on-site health, substance-abuse, teen-pregnancy, and community-health-education focus; (d) a school-based food co-op and workshops for parents on the preparation of nutritious meals; and (e) the school as a center of cultural, recreational, and summer-enhancement activities for the community (see, Community Schools Program Report, 1990).

- The Life Services System of Ottawa County, Michigan (Holland area) is a joint undertaking of some ten social service agencies (including the schools) in the county, to coordinate services for youth and adults who have "functional limitations or handicapping conditions." Services provided within the scope of the project include housing assistance, a range of educational offerings (e.g., special education, physical education, independent living skills training, vocational education, driver's education), employment training and placement, health assistance, social/recreational services, and personal support services (e.g., transportation, financial assistance, family support training). The system operates on a client-intake and individual-client-needs basis under the rubric of an interagency agreement and contributed staff/resources from the member agencies (see, Life Services System of Ottawa County, Inc., 1990).

- The New Jersey Department of Human Services funds projects in some 29 school or near-school locations, designed to link the education and human services systems for adolescents. Underway since 1988, the program offers young people between the ages of 13 and 19 a comprehensive range of services including employment counseling, training, and placement; summer and part-time job assistance; drug and alcohol abuse counseling; family crisis and academic counseling; health services; and recreation services (School Based Youth Services Program, Program Description, 1990).

- Following a feasibility study in 1990, the San Diego City Schools launched the "New Beginnings Demonstration Project of Integrated Services for Children and Families," in the Fall of 1991. Located in and nearby a single elementary school in the poverty-ridden City Heights area of San Diego, the New Beginnings initiative links the school system, county and city services, and the San Diego Community College District in the implementation of a coordinated services Center for at-risk children and families.

  From classroom teacher referrals, individual children and their families can receive health services, guidance and counseling, family advocacy assistance, parent and adult education services, and ready access to an "extended team" of professionals in housing, welfare, mental health, community organizing, etc. Organized on a "case management" basis, computer networking assists this service-coordination experiment. The project has an outside evaluation contract with the Far West Regional Laboratory (New Beginnings, 1990).

- One of the pioneers in coordinated-services experimentation is Cities in Schools, Inc. Cities in Schools describes itself as a national program to "implement comprehensive dropout prevention programs that feature coordinated health, educational, and social services delivered to students enrolled in public schools." Its 1990 year-end report indicated a total of 46 local programs in 16 states at 217 local school sites.

  Cities in Schools locates its roots in the storefront "street academies" of the 1960s and a progressive development since of federal interest and corporate assistance in a private/public partnership. While the specifics of programs vary from site to site, Cities in Schools services are mainly available within participating institutions through "multi-disciplined teams" and a "case management system"--involving "social workers, employment counselors, recreation leaders, educators, health professionals, volunteers, and others as " a support system for at-risk students" (The History of Cities in Schools, 1989).

- With support from the W. K. Kellogg Foundation, the University of Illinois entered into a five-year partnership with four of Chicago's low-income communities in the Fall of 1989. A K-8 elementary school in each of the Chicago communities of Austin, Englewood, West Town, and Pilsen is the setting for collaborated relationships to (a) engage in a "family ties" outreach effort to work with the community in parent education and family assistance; (b) join school and university in a set of "school enhancement" and school-improvement efforts vis-a-vis teaching, learning, restructuring, and professionalization; (c) provide a child care and after-school youth capacity for each school vis-a-vis its community; and, (d) engage in a "partners in health" initiative, linking University of Illinois health service personnel with available community resources in preventive health care (The Nation of Tomorrow Project Summary, 1991).

The project profiles above give a sense of the range of initiatives in the coordinated services arena. They include state programs of the categorical-grant variety; many regional initiatives; targeted social-service programs (e.g., upon the handicapped, teens, preschool children, dropouts, the unemployed, adult illiterates); school district and city services cooperation; large-scale, multi-site initiatives across numbers of states; and smaller-scale, "demonstration" programs at a few, selected sites. Coordinated services experimentation has benefitted from generous foundation support (e.g., the Ford Foundation, Annie E. Casey Foundation, W.K. Kellogg Foundation), increasing corporate donations, steadily growing attention at the State level, a variety of university partnerships, and rapidly developing efforts among cooperating school district and city/county agencies.

With start-up assistance from the Ford Foundation, the National Association of State Boards of Education launched *Joining Forces* in late 1987 as a national effort to encourage and document education/human service collaboration. In their report from the first year, *Joining Forces* (Levy & Copple, 1990) indicated that "some level of interagency collaboration exists in every state." Furthermore, the *Joining Forces* report found widespread interest in state capitals across the nation in designing coordinated-services approaches to new children and family agendas.

Implementing Coordinated Children's Services: What It Takes

Heath and McLaughlin (1987) argue that a vital conceptual step forward in school-improvement strategy came during the 1980s--in a new stress upon "parents as extensions of the schools' business--supporters of homework, monitors of activities, and reinforcers of school values." They argue further, however, that "bringing family and school together," in this day of distressed schools *and* families, is unlikely to lead to effective education, for the problems are simply beyond the resources of these two fundamental institutions. One must now look for help beyond *both* family and school toward the resources of the larger community environment (Heath & McLaughlin, 1987; also Schorr, 1989).

In suggesting such "new strategies," Heath and McLaughlin (1987) acknowledge that "a changed governance structure" must be at the heart of "coordinated partnership efforts." The many complexities and difficulties of it all are seconded by Dryfoos (1991) and Kirst (1991) who recognize the indeterminacies of added funding from outside the school system; the problems of space, facilities management, and differing personnel/salary policies; the necessary negotiation of new roles and relationships between educators and other client-service personnel; the need to nurture effective leadership and a necessity for careful planning; the challenge of professional preparation programs and professional procedures with little by way of a natural "glue" between them; and the tough issues of communication, confidentiality, and information retrieval that are present in any interagency or "networking" initiative.

In this context, it is not surprising that there have been a number of efforts to produce handbooks, guidelines, and question/answer booklets for those implementing collaborative services projects. While short on specifics and detail, the handbooks do provide some general guidelines and an avoid-these-pitfalls "model" of program implementation--including warnings to obtain widespread administrative support/commitment, plan long and carefully, identify clearly a project coordinator/leader, bring all stakeholders/players fully into the project, clarify participating-agency agreements and roles, train all staff thoroughly, include specific mechanisms to link services effectively with child/family needs, and maintain broad and frequently used lines of communication. One document lists "questions to ask" when considering a collaborative effort--identifying in the process key issues of mission clarity, a shared sense of goals and steps toward those goals, adequate financial support and authority, and a well conceived process of shared decision-making (Bruner, 1991).

Evaluating Coordinated Children's Services Efforts

Despite widespread interest, there have been few in-depth evaluations, to date, of coordinated service experiments. As might be expected, the rapidly expanding literature (see Cohen, 1989) abounds with "testimonials" and anecdotal claims to success. However, little "hard evidence" exists documenting significant gains in either education or child/family welfare as a consequence of service-integration investments (see, Schorr, 1988). Indeed, what careful evaluation exists shows a history of experimentation colliding with ubiquitous problems of institutional deficiencies, professional training differences, resource constraints, communications gaps, authority and "turf" issues, and legal and leadership problems.

Many of these problems were noted as early as 1971 in the Syracuse University evaluation of experiments in social services integration (Policy Memorandum SYR 71-5, 1971). Nine school-social service projects, at all ranges of schooling K to 12, were examined, representing low-income localities in Michigan, Massachusetts, Connecticut, Georgia, Virginia, and New York. No data on the effects of the projects on the education of children at the nine sites were available to the evaluators; however, there were valuable findings across the projects regarding administration and implementation.

The evaluators concluded, first, that expectations of cost savings from service coordination might be unfounded; indeed, the rather radical changes in the structures of delivery systems needed to integrate services effectively could well lead to increased costs. Second, these early projects encountered a number of time-consuming legal complications, ranging from state restrictions on the latitude of facilities use to problems of fund commingling and resource or client accounting and reporting. Finally, the evaluators found an array of administrative/bureaucratic problems--including the slowdowns caused by "bureaucratic immobility," fears of loss of autonomy and power among the heads of separate service agencies, difficulties in engendering adequate client and community participation, and problems of commitment and cooperation among differing employee and professional groups (Policy Memorandum SYR 71-5, 1971).

Stake's (1986) examination of the initial years of the Cities in Schools effort provides a second assessment of early coordinated services experimentation. His 1986 book, *Quieting Reform*, is actually a lengthy commentary upon a formal evaluation of Cities in Schools' initiatives in Atlanta, Indianapolis, and New York City--an evaluation reported by the American Institute of Research (AIR), in 1981. The

AIR evaluation found little evidence that Cities in Schools had been successful in integrating services, in measurably impacting youth, or in overcoming discrepancies between a launch-the-program rhetoric and a far-different reality of program operation. Stake's (1986) commentary discusses the difficulties in adapting quantitative evaluation methods to a service-integration process; difficulties in breaking evaluation away from the "politics" of program funding, leadership, implementation, and review; and difficulties in finding hard evidence of "results" in an effort requiring long-term program development. As in the early 1970s experiments, the Cities in Schools initiatives of the late 1970s and early 1980s were plagued by problems of communication, administration, professional turf-protection, and inconsistencies (e.g., of philosophy, intervention strategy, and language) (Stake, 1986; see also, Davis & Halliday, 1987). Moreover, the youth service activities of Cities in Schools were only peripherally integrated into the ongoing curricula, cultures, and operating procedures of their host schools.

This last point is emphasized in one of the most recent multiple-case evaluations of coordinated-services efforts (see Cohen, 1991). The Annie E. Casey Foundation's "New Futures" grants to Dayton, Ohio, Pittsburgh, Pennsylvania, Little Rock, Arkansas, and Savannah, Georgia were studied in 1991 by the University of Wisconsin's Center for the Study of Social Policy (Wehlage, et. al., 1991). At this time, the projects had completed three years of experimentation under an initial five-year commitment of funding from the Foundation (a $50 million commitment overall).

This mid-stream evaluation concluded that the collaborated services interventions "have not fundamentally changed the way schools work or addressed the root causes of school failure..." (Cohen, 1991). Although the intervention strategies varied from community to community, the four projects all used a "case management system" as a vehicle for bringing an array of additional social services to students and their families. Extended-day programs and extensive staff development activities were also a part of the intervention in three of the four cities (Wehlage, et. al., 1991). These add-on efforts, while supplementing the ongoing program of the school, had not resulted in significant changes in the schools themselves, in the schools' relations with their surrounding parental communities, or in the achievements and experiences of the schools' pupils. There was, however, evidence of an improved capacity to share information about, and to track the progress of, students across organizational boundaries (Cohen, 1991).

Beyond these few investigations of substance into coordinated services in education, a few additional insights from the existing literature add some further understanding and perspective to the above findings. First, Daphne Johnson's (1980) examination of a British amalgamation of children's welfare, health, and education services, after nearly two decades of implementation at the secondary-school level, found that long standing issues such as the ways that teachers, education welfare officers, social workers and other supporting services worked together were still unresolved (Johnson, 1980).

One of the central stumbling blocks in the British context, according to Johnson (1980), was difficulty classroom teachers experienced in re-conceptualizing their roles in "pastoral" rather than traditional teaching-learning terms. With teachers accustomed to classroom-lots rather than particularistic individual needs, and accustomed furthermore to a sense of "boundary" between school, home, and other social-service agencies, it was not a simple task to introduce a new caregiving norm to the institution. This normative transition in the professional atmosphere was also hindered by (a) inadequate teacher understandings of the roles of other service providers and the help to be expected from them, and (b) an undervaluing by other service providers of the contribution of the school toward the larger welfare of pupils (Johnson, 1980).

These findings are by no means limited to the British experience. Farrar and Hampel (1987) observed, similarly, that a "Balkanization" of the social service staff characterized the fifteen public and private high schools they studied. Furthermore, the social service aspects of high school life (e.g., health assistance, substance abuse, job-counseling, teen parenting) were not integrated into the larger academic environment of the case-study schools (Farrar & Hampel, 1987; see also, Muncey & McQuillan, 1991).

Second, while teachers can have difficulty acquiring a "pastoral" or child-care perspective, other-service personnel can be similarly constrained by their own institutional imperatives and expectations. For example, Zellman (1990) found, in the U.S., that increasing reports by school staff of child-abuse were not matched by appropriate action by child-protection agencies, which "everywhere are attempting to reduce the number of reports they must investigate and to find ways to reliably screen out all but the most serious cases" (Zellman, 1990). Zellman (1990) raises "concerns about the ability of child protective agencies and the schools to interact effectively to protect children." In like manner, Finkelhor (1984) discovered that agencies collaborating with one another in cases of child sexual abuse each tended "to operate on cases in an isolated way within their own restricted professional network." Further confusion stemmed from the fact that

> "For many professionals, child protection agencies are 'black boxes' . . . The processes employed in making decisions, the evidence used to make them, and the internal mechanisms employed to help ensure that the decisions are good ones are completely unclear" (Conte, 1988).

Third, whether success-constraining differences in professional approach and perspective stem from educators or other providers, hierarchical conditions (particularly resource and political constraints) can be central issues. For example, Useem (1991) discovered that coordinated services efforts in Massachusetts (a pioneer state in this field of endeavor) "unraveled" under the statewide recession beginning in 1988. Originally perceived by many legislative leaders as a way "to save money and streamline operations" (Useem, 1991), coordinated services efforts floundered under the pressures of budgetary retrenchment. Turf consciousness and "sparring" between state agencies increased, consistency in program leadership and program interpretation suffered, area offices for children were closed down, and top-level (Governor's Office) support was lost within the larger challenge of a state fiscal crisis (Useem, 1991).

To date, coordinated service projects have been typically conceptualized in local terms--that is, a service-provider focus upon a micro-community of families and individuals, often within the attendance-area of a single school or cluster of schools. Useem's (1991) analysis shows that the success of the locality can be dependent, in no small measure, upon "outside" phenomena (particularly city wide and state-level commitments).

Furthermore, work by Littell and Wynn (1989) on a closely related theme shows disturbingly that the range of community and social-services resources available to be drawn upon can be decidedly marginal in the inner-city compared with suburbia (see also Wynn, et. al., 1987). Coordination of inadequate resources and/or understaffed resources is obviously a much different undertaking from that of a resource-rich program of intervention. David (1978) warns that the "family-education couple" (a participation partnership between home and service-provider) that is typically assumed in most service-coordination experiments, hinges heavily upon the trust that parents are willing to place in the responsiveness of the education half of the couple--a trust easily lost or never-discovered (see also, Litwak & Meyer, 1974).

Coordinated Services and Institutional Realities

In *The Good Society*, Robert Bellah et. al. (1991) note succinctly that "converting individuals, however important, does not take the place of converting institutions." Of course, the current thrust toward service coordination is by no means viewed by its proponents in individual "conversion" terms. Nevertheless, much of the focus is on issues of professional personnel, a receiving clientele, relationships between differing service-providers, program leadership, school staff vs. other-service perspectives, school-home connections, program-participation inducements, and provider-to-provider linkages--all traceable, in large measure, to perspectives, attitudes, affiliations, and backgrounds at a person-to-person level of analysis. Far less attention has been given to the institutional side of "conversion" in service-coordination. To be sure, discussions are common of problems of "turf," communications, resource allocation, and bureaucracy--but little of this discussion probes deeply into fundamental questions and conceptualizations of organizational structure, interorganizational dynamics, and organizational networks in education and social services provision.

Here, our inquiry can benefit from an insight from James March and Johan Olsen's volume, *Rediscovering Institutions* (1989). March and Olsen (1989) suggest that two instructively different models of decision processes in institutions are captured by the terms aggregative vs. integrative institutions. An aggregative institution is a collection of diverse individual and group interests. These diverse interests coalesce through exchange and negotiation (under a set of governance rules) within an aggregative or building-up process of acceptable-to-the-majority policy and resource allocation agendas. Leadership in an aggregative context can involve much brokering of diverse interests and is often a search for a modicum of "incentive compatibility" between the needs of the leader and the led. An integrative institution, on the other hand, is a collection of persons pursuing the "general welfare within a context of shared social values" (March & Olsen, 1989). Individuals and groups coalesce around a common institutional history, shared obligation, reason, social traditions and a sense of community. Leadership in an integrative context involves "a trusteeship for social traditions and future needs, and an educational role" (March & Olsen, 1989).

Few institutions are likely to be found at either extreme of the aggregative-to-integrative continuum. Most are complex mixtures of the competitive, negotiative order of the aggregative (Gesellschaft) and the "community" atmosphere (Gemeinschaft) of the integrative. Nevertheless, these separate paradigms can be important to an informed analysis. Posing the issue of "competition" vs. "collaboration," Boyd (1992, p. 521) asks, "To what extent is competition needed within and among school organizations? To what extent should it be allowed to drive out collaboration? To what extent is a balance needed between competition and collaboration?" "How do we design and manage school organizations to foster real collaboration, and how much and what kinds of collaboration are needed?" While these questions are not given direct attention in the following analysis, the issue of collaboration vs. competition is a central theme. We draw below upon literature from organizational theory to examine three key school-site constraints upon children's services collaboration.

The School as a Competitive "Micro-Polity"

A rich literature attests to the wide diversity of interests, "powers," perspectives, preferences, and groupings within schools. From the work of Willard Waller (1932) to that of Charles Bidwell (1965), and on to recent literature on the "micropolitics" of schools (see Ball, 1987; Blase, 1991; Hoyle, 1986), evidence abounds that schools are small polities of teachers, students, administrators, service workers, and parents in either real or potential conflict. Research into the school principalship finds the administrator negotiating the compliance of other actors in the school--finding ways to "buy" cooperation, build alliances, and mediate staff differences--far more often than he or she is engaged in "ordering" a contribution of effort (Becker, 1961; Morris, et. al., 1984). Scholars addressing the issue of school-site leadership in the principalship have focused (a) on maximizing the political skills of the principal (see Wiles, Wiles & Bondi, 1981), or alternatively (b) on the principal's reshaping of the school culture into a kinder, softer, more cooperative mode (see Barth, 1990; Deal & Peterson, 1990). In short, the internal organization of the school is in many ways more a coalition of interests than it is a collegium.

This is not to say that collaboration is missing or even in short supply in schools, or that collaboration between schools and the "outside" is nonexistent. As in any organization, the maintenance of schedules, of complementary activities, of work products (e.g., course-of-study completion), and of amicable workplace relationships depends upon extraordinary day-to-day cooperation. Schools also have become increasingly adept at the cooperation needed to find outside resources. These include donors and grants-and-contract opportunities, the creation of partnerships with businesses or universities, use of outside specialist services, and fulfilling such "needs" as improved police security or work-study placements for pupils. Nevertheless, both scholar and practitioner definitions of an outstanding school quite often describe settings where collaboration is well (and almost unexpectedly) above the norm--where teachers pitch in to help maintain school-wide discipline, where parent-involvement is exceptionally high, where teachers do indeed work together to develop or share curricular and pedagogical ideas, where departments share space and resources.

Eric Trist (1977) observes, however, that a competitive-style bureaucracy is the "prevailing organizational form" in our society. From internal "ladders" of managerial position and career opportunity to battles for territory and resources between organizations, the competitive organization is the societal norm. To ask for collaboration under such structures "stands in contradistinction to the psychopolitical pressures on individuals and component groups" (Trist, 1977). Trist (1977) goes on to note that conflict between competition and collaboration "is endemic, despite efforts, however well intentioned and often partially successful, to reduce it." Where collaboration surfaces as an observable attribute of a work setting, continues Trist (1977), some deep structures of social interaction have altered--including most particularly an acceptance of interdependence within the organization and a new sense of the relationship of parts to wholes.

The School as a Place of Problematic Control

Added insights can be gleaned from the study of patterns of organizational coordination by Van de Ven, Walker, and Liston (1979). Where coordination works, the participating organizations have managed to mesh together as a social system to "attain collective and self-interest goals or to resolve specific problems for a target population" (Van de Ven, Walker & Liston, 1979). The authors call this the formation of an "interagency network." Such specifics as "awareness" and "consensus" can be vitally important to the interagency network--including (a) an awareness among all participants of the services and goals of other agencies plus an awareness and acquaintance on the personal level between service-providing individuals, and (b) some consensus among participants regarding the mutualities of goals and service interests between agencies. Shared resource dependencies and frequent communication between agencies are also important to the sense of a "network." No less important, however, can be a formalization of the cooperative relationship, including specific rules, policies, procedures, and a written compact or contract. The viability of collaboration also depends heavily on how firmly the individuals in participating agencies perceive the relationship to be "equitable, productive, worthwhile and satisfying"

(Van de Van, Walker & Liston, 1979). Finally, success can hinge, as well, on the extent to which the collaborating participants see themselves in a relationship that is changing or affecting "the internal operations of one another" (Van de Van, Walker & Liston, 1979).

What the 1979 Van de Van suggestions recognize clearly is the central point made later by Leonard Baglow (1990) who stated that under cooperation no one agency controls the whole process. To be sure, this point is taken for granted in any program of collaboration. However, neither schools nor most other children's service providers are institutions in which control is shared with ease (see particularly, Freidson, 1986). In schools, teachers are traditionally expected to be fully "in control" of their own classrooms. Pupils are expected to be "under control" throughout the school, yet the potential for disorder always exists (Waller, 1932). Principals are expected by central-office administrators to maintain stability and an equilibrium in their schools. A fallout of this concern for control is a reluctance to share problems of control with other professionals. Consequently, there is a built-in tendency in the culture of the school to jealously guard both the object and the process of control. A second, and related fallout, is that *where control must be shared, it tends to be shared in a fragmented and role-specialized rather than interdependent manner*. Typically, guidance counselors advise students in near-isolation from teachers, troublesome pupils are "sent" from the classroom to the school office, certain pupils are "pulled" from the classroom for specialist help in reading or speech therapy, the extra-curriculum (from football to chess club) exists as a separate program for which teachers receive added pay, and professional specialists, from nurses to librarians, are allocated their own "turf" in the school where their independent control is honored.

Baglow (1990) concludes that each institutional partner in collaboration must feel, through shared communication, that its separate control-interests are not ignored. To meet this need, coordination projects typically use a multi-disciplinary team or an interagency coordination committee (Skaff, 1988). However, Rosenheck (1985) suggests, based upon research into collaboration between psychiatrists and police officers, that something as institutionally-defining as a formal "liaison structure" may be necessary. Such a structure would constitute a new managerial role or office, at an intermediate hierarchical level, working to resolve social-control issues. Others have suggested this kind of new professional role (a manager of collaboration) (e.g., Cunningham, 1990; Useem, 1991), noting that professional collaboration by no means implies less administration. Indeed, the costs of management, in effective children's service coordination, can increase.

The School as a Problem in Territorialism

It remains a reality that services for children in schools and in the community at large are far more likely to be fragmented and independent than coordinated and complementary. Accordingly, the most typical barrier to coordination is agency territorialism ("turf") (Skaff, 1988). A sense of territory, and its attendant problem of control, are at the heart of many efforts to understand the interplay of incentive systems and contributed professional effort in education.

In earlier work (Boyd, 1991; Boyd & Crowson, 1981; Boyd & Hartman, 1988), we have argued that a "perverse structure of incentives" tends to be characteristic of public schooling. From one perspective, a culture of reciprocity characterizes the school as an organization: Contributed effort can be heavily contingent upon benefits received and exchanged. Building principals, for example, may be reluctant to supervise teachers' instructional behavior too closely because they must "buy" the cooperation of classroom teachers in the larger work of the school (see, Shapiro & Crowson, 1990). Similar quid pro quo arrangements often characterize the "negotiated order" surrounding interactions between teachers and pupils, the school and its parental community, departments within the school, and administrators with school boards (see Blase, 1991; Crowson & Morris, 1991; Morris, et. al., 1984; Waller, 1932). From a second and related perspective, the school is a veritable marketplace of turf-maintaining incentives--many of which lead behavior away from organizational effectiveness toward self-interest and "survival" (Boyd, 1991). Maintaining school-site stability and control, for example, often elicits more rewards for principals, from the upper bureaucracy, than does the uncertainty and "risk" of improvement-oriented change (see Crowson & Morris, 1985; Goldring, 1986, 1990).

Barbara Gray (1985, 1991) suggests a "stakeholders" approach to the problem of territorialism. Collaborating stakeholders need to perceive that their activities are truly interdependent. Each stakeholder group must be convinced that its interests are affected by the central "issue" and that it consequently needs to influence the outcome. Perceptions of mutual resource dependency can be especially helpful in generating collaboration (Van de Ven and Walker, 1984). However, Gray warns that some stakeholders nevertheless may find it in their interests to preserve a status quo, using their power and resources to block collaborative accomplishment (Gray & Hay, 1986). At the same time, other stakeholders may work solidly toward shared accomplishment while holding little power to pursue it. Consequently, those stakeholders who would be the "conveners" of collaboration "must be seen as legitimate and powerful" with sufficient incentives at their disposal to push others toward meaningful participation (Gray & Hay, 1986). "Unless other compelling incentives exist," Gray and Hay (1986) conclude, "powerful stakeholders will resist collaborative interventions so that they can preserve their individual control over the domain."

An examination of "stakeholders" and exchanges of incentives in the coordination of children's services at the school-site, raises several issues. First, it is not always clear just who the stakeholders are and what the "stakes" are in service-coordination experiments. Although classroom teachers are obvious candidates, they may perceive few benefits from involvement in coordinated services because of their tradition of "isolated autonomy" and their sense of already being overburdened with responsibilities.

Second, parents are clearly stakeholders but are seldom offered incentives beyond a chance to "participate" in program governance or to receive program services. In some recent research on an early-intervention partnership between parents and professionals, Brinker, Frazier, and Baxter (1991) discovered that inner-city families do respond to direct, tangible incentives--but the necessary incentives must often speak to the basic needs of target families (e.g., food, shelter, clothing, protection, child-care) (see also, Litwak & Meyer, 1974). Brinker, Frazier and Baxter (1991) also reported that an effort to shift "from tangible incentives to personal relationships and information" as participation incentives for families was not successful.

Third, stakeholder confusion is evident in most coordinated-services efforts, as Stake (1986) noted, in that state governments, foundations, Mayors' offices, and universities not only have been the key "interveners" and fundraisers--but also bring their own stakeholder interests to otherwise "natural" organizational settings. Furthermore, funding agencies often have deep stakes in a short-term payoff and clear evidence of goal-accomplishment while "receiving" agencies' stakes are just as deep in long-term change and a bit of small progress toward goal-accomplishment.

Fourth, any linkage of schools with other service-providers necessarily broadens the cross-organization "stakes" that must now be accommodated. As Gardner (1992) emphasizes, each participating organization will have its own culture, life cycle, and "insecurities just like humans." Furthermore, there are many "realities" of organizational life--from a leadership turnover to some inside factionalism to some resource constraints--that now become externalized to other players in the partnership (Gardner, 1992). On the other hand, each organization still brings to the linkage an array of independent self-interests, particularly those identified by Banfield (1970) as an organizations's critical "maintenance and enhancement needs."

Other scholars have raised some more fundamental questions about the stakeholders approach. Davidson (1976), for example, warns that individuals who participate in service-coordination projects can find themselves with "stakes" in irreconcilable camps. As noted above, their "home organizations" (e.g., police departments, city social services, community health offices, schools, parks and recreation departments) are stakeholders, demanding loyalty to interests that may not facilitate eager cooperation. The cooperating group itself, however, can become a stakeholder in its own right, asking for a new loyalty across professions to a new, common goal.

Over time, participants from diverse groups can undergo a "life cycle" of initial participation, trust-development, task-definition, problem-solving, and group integration. With success, the coordinating group can gradually wean itself away from "home" stakeholders toward a sense of its own coordinative identity. But, this process may be impossible if projects are too carefully designed at the outset to pay homage to, and negotiate balances among, an array of home-organization participants (Davidson, 1976).

Thus, Hall, et. al., (1977) argue that while exchange theory tends to be the dominant theoretical perspective on the facilitation of interorganizational relationships, many successful experiments find a foundation in a strong formal agreement or a legal mandate--establishing, in effect, the legitimacy of the coordinative relationship as a "stake" of its own. In a similar vein, Useem (1991) suggests that with the difficulties in engendering "real" cooperation among the various territorialities of service-delivery, it might be wise to legitimate the separate stakeholder status of any cooperative agenda through the aiding-and-abetting actions of (a) a state-funded Council or Commission on Children and Youth, (b) a nonpartisan academic "think-tank" to conduct research and provide expertise, (c) the creation of "strong regional policy groups that oversee youth policy," and (d) the creation of a "quasi-public organization" for any collaborative endeavor with "its own separate Board of Directors drawn from many constituencies" (Useem, 1991).

A further questioning of the stakeholder (or negotiation and exchange) approach to coordination might be found in the work of those who have closely explored the "technology" of collaboration (Jones, 1986; Stodden & Boone, 1987). Most specifically, the creation of a common information base across agency boundaries can have its own institution-building value. In a commentary upon the Wehlage et. al. (1991) evaluation of the "New Futures" initiative, for example, Cohen (1991) has suggested that the project's cross-agency management information system to track students' progress may have been the "real winner" of this experiment. The technology, an across-disciplines case-management information system, can have such value in-and-of-itself that service-coordination emerges as a side-effect. The theoretical value of such a technology-driven (rather than exchange-modeled) approach to collaboration is supplied by Bidwell and Kasarda (1987), who note that "an organization specializes in the creation of outputs to the institution of which it is a part--hospitals to health care, schools to education, firms to the economy, and so on." Indeed, an organization with an output cutting across institutions might even go far toward the creation of a new, coordinative institution. On the other hand, information sharing remains one of the major stumbling blocks to effective services coordination. A key issue is client confidentiality.

In summary, we would argue that coordinated children's services experimentation in public schooling has yet to face some tough realities in the "converting institutions" phase of successful implementation. A central issue resides in the simple, yet significant observation, that public schools tend to be more fundamentally organized internally toward a competitive arrangement of services than toward collaboration. The individual school is a "micro-polity" of negotiated interests and "purchased" cooperation. Additionally, the public school is often described as an organization with a "control orientation," but an organization that simultaneously maintains a structure of dispersed and autonomous professional control (Lortie, 1969). Finally, the public school is well endowed with many protections of what has surfaced as a key administrative issue in children's services experimentation: turf. Unresolved are important matters of perspective and strategy in overcoming territorialism: A "stakeholders" approach? A formalization and legalization strategy? A technology and "outcomes" approach? Whatever the strategy, somehow the "institutionalization" of organizational change must find that the norms and values of the innovation are "embraced by members of the organization" (Curry, 1991).

Toward Coordinated-Services Implementation:
Some Practical Administrative Issues

If coordinated children's services are to be successfully "embraced" by the public (and particularly inner-city) schools, some of the practical questions of administration raised by the preceding review should be subjects of careful inquiry. Most coordination ventures to date have not addressed such issues adequately, but many of the ongoing projects provide important insights into the problems of managing coordinated services. Our review suggests four key categories of unresolved issues on the "institutional" side of services-coordination. These categories involve matters of school-community and inter-professional connections, professional roles, thresholds of program support, and program governance.

The Institution and its Connections

The pursuit of a renewed sense of "connection" between home and school is undergirded by assumptions ranging from coordinated services as investments in children, to new perspectives on school-community ecologies, to mutually reinforcing pathways of development for children. Internally, within the school, additional and closer connections are posited between an array of professional service-providers. Indeed, the hope is that "a network of learning environments" (Fantini, 1983) might be one major connections outcome for schools.

The difficulties in tightening connections, however, are well illustrated in Brinker, Frazier, and Baxter's (1991) finding that some hard-currency incentives often may be necessary to family participation. Also, evaluations of service coordination projects to date frequently report, as rather common misconnections, unresolved issues of information-sharing, resource mingling, and professional "turf."

Just what is an effective "connection" in coordinated children's services, and how are such connections established? One strategy, noted earlier, is to assume the "competitive" model of the organization and its environment--in which connections will flow best out of shared incentives and a "negotiative" approach to joint authority or control (Gray, 1991). Each potential connector is a "stakeholder" with a set of interests and a special agenda of his or her own. Collaboration can be seen as "the unfolding of a negotiative order" in which a "previously unconnected set of stakeholders" is newly organized into the pursuit of a common agenda (Gray, 1991). Along these lines, the Collaborative Efforts Action Group of the Urban Superintendents' Network (1991) suggests the importance of written agreements and carefully defined tasks/assignments between cooperating organizations. At the outset, securing the strong support and involvement of "all partners," as well as an honest and regular sharing of information, is vital. The rewards of collaboration include a greater overall capacity to expand services without requiring each organization to be "spread thin."

Again, as the Brinker et. al. (1991) study demonstrates, a sharing of resources and incentives can play a large role in making connections, but many other aspects of the "negotiative" process are also important (e.g., learning differing terminologies, finding common interests, resolving ideological conflicts). Just as important as incentives that build connections is a thorough administrative understanding of the many institutional *disincentives* to collaboration (Gray, 1991). Autonomy, time, non-accountability, control over one's own clientele, a sense of personal accomplishment, discretionary decision-making, and the control of space are all powerful rewards for the noncollaborator. Very strong incentives may be required to overcome these pressures toward non-connection.

A second administrative strategy might assume the "integrative" model of the organization as a starting point. While the stakeholders approach finds connections evolving out of the negotiations toward collaboration, the integrative approach sees connecting as the necessary early step toward collaboration. Incentives, formal agreements, and negotiated contributions may be far less important than establishing trust, opening up decision-making and governance, building conceptual and attitudinal bridges, establishing newly shared rituals, traditions, and symbolic connections, and working toward a sense of "community" across organizations (see, Deal & Peterson, 1990). Sometimes, as mentioned earlier, these connections-building efforts may be assisted by powerful "outside" mandates or by the across-groups utility of a shared technology.

Most handbooks for service-coordination suggest a combination of both strategies. Thus, the Urban Superintendents' Collaborative Efforts Action Group (1991) counsels turf, power, and resources negotiations, to be sure, but also urges practice in shared decision-making, pursuit of a common vision, and a push toward a "community of believers." Underexplored to date, either theoretically or in examinations of practice, are questions of just what administrative gains or losses might accompany each strategy.

From the perspective of the stakeholders approach, the problems of "turf" characterizing many experiments to date represent inadequately resolved negotiations and rewards distribution. From the perspective of the integrative approach, turf may reflect an inadequately established set of connections as a precursor to project implementation. For improved understanding, we need thorough investigations of whether there are key differences in the turf problems faced by projects (such as San Diego's "New Beginnings") which devoted a long time period to connections-building before implementation in contrast to projects which "jumped" more quickly into program implementation.

The Professionalization of Service-Coordination

Three evaluation-related concerns noted earlier were that (a) coordinated services interventions have had little impact on "the way schools work" (Cohen, 1991); (b) both educational and other-service professionals have found it difficult to reconceptualize their roles (Johnson, 1980); and (c) agency constraints plus differing standard operating procedures have tended to restrict professional networking (Conte, 1988; Zellman, 1990). In some dissertation research, Hulsebosch (1988) discovered, surprisingly, that a sample of classroom teachers who most fully identified themselves as "professionals" were less likely than other teachers to give extra time to parent-involvement. Relatedly, Susan Moore Johnson (1989) has warned that efforts to "restructure" schools professionally are in danger if the effort is to make classroom teaching something other than classroom teaching.

The collaboration of professionals in children's services settings is heavily constrained by a separation of training and certification systems (Cunningham, 1990; Kirst, 1991). Further separation stems from a deep tradition in teaching of professional autonomy and a heavily "psychic" reward system (turned inward, rather than outward toward cooperation) (Lortie, 1969). Professional separation within the school also flows from an elaborate division of labor and a division of professional identities (e.g., an identifiable separateness as special educators, lower-elementary teachers, upper-elementary, reading specialists, guidance counselors, science specialists, social workers, nurses, etc.) (Freidson, 1986).

Schools also tend to have an informal hierarchy of professionals, with teachers claiming ascendancy over (and undervaluing) such "ancillary" professionals as social workers, nurses, child-protection workers, community-relations representatives, recreation specialists, and librarians. Finally, each profession is inclined to protect its own, separate "gatekeeping powers" (Freidson, 1986). These are perquisites each profession and professional holds dear--such as dispensing officially recognized grades for classroom performance, deciding when a child needs remedial or psychological assistance, choosing whether to investigate a potential child-abuse case or dismiss it, and certifying child illness or disability. Despite a long history of professionalization within the confines of such institutional contexts as schools, hospitals, and government agencies, there is surprisingly little research on interprofessional relations in such organizations (Freidson, 1986). Some valuable and instructive work has explored professionals' interactions with clients (e.g., children, families, parents) in varieties of settings, including schools--in a body of work often labeled the "street-level bureaucracy" (Lipsky, 1976, 1980). But, in addition to clientele relationships, the interactions of professionals with one another should be studied much more thoroughly, in terms of the broader organizational context in which they work (Freidson, 1986).

Practical suggestions for engendering greater interprofessional collaboration in schools might include (a) structural (facilities) changes to break down isolations of professional space; (b) continued experimentation with the professionally shared governance reforms already underway in many school district settings; (c) additional legal mandates not unlike the "staffing" provisions in special education, where a team of professionals must share gatekeeping responsibilities; (d) formal, explicit agreements between child-service professionals, where control, information-sharing, pooled resources, roles, and conflict-resolution procedures are all carefully specified; and/or (e) an infusion of new managerial roles in schools emphasizing mediation skills and a coordinative leadership, roles already defined in some projects as "facilitators," "site-directors," or "case-management specialists."

Case studies of ongoing projects nationwide should explore intensively such alternative models and problematic experiences/successes as these and others in the professionalization of children's service collaboration. Simultaneously, such evaluation should bear in mind Cunningham's (1990) warning that, at a deeper level of practicality, the revision of professional roles and responsibilities in schools might need to rest upon a prior coordination of professional training/credentialing at state-level and university.

The Support Threshold

Service coordination has a ring of increased efficiency to it. It is not difficult to read into the concept some "savings" of a more timely targeting of services, reduced service duplication, and a greater payoff per dollar of intervention. Nevertheless, there is no evidence in projects to date that cost reductions will accrue. Indeed, children's service coordination appears--at least during its early years of experimentation--to be a more expensive undertaking than current service-fragmentation.This is not to say that service coordination (particularly in the long run) cannot be simultaneously both more costly and more efficient. An important assumption of the "investment perspective" mentioned earlier in this paper (Hawley, 1990), is that complementary investments (education and other-services) and a longitudinal follow-up of services offer a much better hope of success for at-risk children than time-distributed and non-complementary investments--more costly but possibly more productive.

Similarly, costliness may well be a short-term product of the rather considerable "restructuring" that is needed to bring service-coordination to fruition. Stakeholder "negotiations" take time and leadership, new technologies (e.g., computerized case-management) can be costly when under development, an additional layer of start-up management has often been necessary, and the incentives needed to wean project participants (from professionals to parents) away from "old ways" into cooperation can be heavy at the front-end of any innovation. Such "transaction costs" may or may not be long-term features of program implementation.

Nearly all the experimentation in children's service coordination to date would have been impossible without considerable "outside" assistance. Foundation grants have been sizeable, state grant-in-aid programs are in evidence, universities and corporations are project "partners," city and county social-service agencies have reallocated offices and reassigned personnel, and some local school districts have invested heavily in specific school-site innovations. An unknown at this time is how long such start-up support is necessary to the later "take-off" of smoothly and successfully operated programs.

It will be important to track carefully, case by case, the added costs of both success and failure, the assumptions of a possible "efficiency" of effect upon the lives of children and families, the transaction costs versus the direct-service costs of coordination, and the time-plus-cost framework of start-up towards ongoing implementation. Beyond these financial considerations of support, however, there are additional "support issues" that appear to have been neglected in the project-report literature to date but may be critical to an understanding of service-coordination in school settings. Examples of these, briefly, may be such matters as

(a) ***Risk***. Gray (1991) observes that disputes in collaboration often arise in differences between the ways collaborating parties perceive problems and the risks that accompany unresolved or poorly settled problems. Risks in coordinated children's services may range from the fallout of lost confidentiality to challenged professional autonomy, school-community conflict, professional-to-professional cleavages, personnel (e.g., job-redefinition) disputes, and a potential for litigation that tends to accompany new ventures. Hannaway (1988) has noted that the allocation and management of risk is a typical problematic feature of public education--thus likely to be more so in children's service coordination.

(b) ***Stewardship***. Gray (1991) defines a steward as "someone who actively directs affairs," and defines stewardship as "managing one's affairs while taking into consideration others' rights and responsibilities." The support that flows from effective stewardship can be critical in maintaining the energy of participants, in reaching a new set of organizational values around the notion of collaboration, and in engendering trust among participants (Gray, 1991). Projects to date appear to vary in their provisions for stewardship--from no designated steward, to inside-the-school project directors, to outside-appointed project directors, to liaison-committee chairpersons, to added-on principal duties. These alternative approaches to stewardship may have widely varying consequences--all little known at this time.

(c) ***The Governance Issue***. Despite a warning by Heath and McLaughlin (1987) that "a changed governance structure" should be at the heart of collaboration, fundamental questions of governance remain unresolved. Indeed, in the final chapter of her book, *Collaborating*, Barbara Gray (1991) indicates that among the "future challenges" in an institutionalization of collaboration are questions about (a) who has "the legitimacy and perceived neutrality" to oversee collaboration and (b) how can commonality in principles of service be maintained amid norms of professional autonomy?

It is just this problematic combination of control and autonomy that is addressed in depth by Shedd and Bacharach (1991) in *Tangled Hierarchies*. They observe that an "old" struggle between teachers preserving their autonomy and administrators seeking to establish control has functioned in schooling as "a relatively stable set of arrangements for making ad hoc adjustments to competing pressures" (p. 191). Continuing, they claim that

> problem avoidance, insulation from 'outsiders,' and controlling or pacifying those 'beneath' you--whether they are lower-level administrators, teachers, or students--become overriding cultural values that tie practitioners together, even as they contend for each other's attention and resources (Shedd & Bacharach, 1991).

The "stable sets of arrangements" Shedd and Bacharach note constitute part of a structure for dividing responsibility between management and professional in education. Curiously, these arrangements "tie practitioners together" by parceling out separate domains of responsibility and control. Such "old" structures as the above (e.g., avoidance, insulation) have been under challenge in recent efforts to reform schools toward broadened involvement in decision making and better school-community relations.

To change structures of governance, the kinds of supports discussed above (e.g., resources, risk allocation, and stewardship) are essential (Shedd & Bacharach, 1991). Also, answers are needed to key questions of legitimacy (of authority) but simultaneously administrative neutrality as well as commonalities of professionalism amid norms of autonomy. Successful children's service collaboration within this necessary balancing of competing values can require careful attention to such practical matters as (a) setting ground rules as to acceptable and unacceptable behavior among participants (Gray, 1991); (b) establishing a communicative clarity (written guidelines) as to just what each "service" should expect from and report to the others (Zellman, 1990); (c) finding ways to surface discontent and grievances (e.g., staff logs, third-party "observers") as collaboration unfolds (Rappaport, et. al., 1985); and (d) establishing a formal structure of participation, defining "who does what and who deals with whom" (Shedd & Bacharach, 1991).

Perhaps the most important practical suggestion is offered by Useem (1991), who observes that whatever the organizational/governance structure established for collaboration, all "have different strengths and weaknesses and each has its time and place where it can be effective; but all can be vulnerable in a given time period." "In the end," she notes, "organizational configurations matter less than the kind of political and public support that has been developed and which can be mobilized" (Useem, 1991).

SUMMARY

Among the many strategies for strengthening school-family and school-community connections in urban education, school-centered or school-linked coordination of children's services has captured much of the attention (e.g., coordinating education, health, recreation, family assistance, child-care, substance-abuse counseling, vocational training). The movement is driven by a sense of national crisis in the conditions of life for children in urban America and by widespread evidence of reduced access to "support services" for families in inner-city environments. The movement also springs from a renewed sense of the vital "ecologies" of relationships between schools and their neighborhoods, a sense of the importance of complementary societal investments in the lives of children, and an appreciation of the benefits in child-development of linking teaching and social services.

Despite widespread budgetary retrenchment in states and cities across the nation, nearly every state has coordinated services ventures. Programs and experiments vary widely, from across-state or national-scale programs to state-level interagency coordination, state-local partnerships in collaboration, city and county-led initiatives, and single-neighborhood or individual school-site experiments. Some of the projects are aimed broadly, others are more focused upon specific target populations (e.g., dropouts). Foundation interest and support have been sizeable, as has the interest of a number of influential national associations (e.g., National Association of State Boards of Education, Council of Chief State School Officers, National Governors Association). The various associations have been particularly influential and helpful in "tracking" coordinated-service experimentation nationally and in a production of handbooks and guidelines for practitioners.

Children's service coordination is not an entirely new phenomenon. Evaluations of some of the early ventures provide some useful information. However, many of the recent efforts (late 1980s, early 1990s) are still very much in their formative years of implementation, so evaluation at this time is mid-stream and tentative. Nevertheless, some significant insights gleaned from the "old" and "new" evaluations are that (a) cost savings from services-coordination should not be expected; (b) the implementation of service-coordination can be an extremely difficult undertaking organizationally (with legal complications, bureaucratic "immobility," "turf" battles, communications breakdowns, etc.); and, (c) the "deep structures" of schooling (e.g., the fundamental ways schools work, professional role-interpretations, relationships among child-service procedures across the professions) have been largely unaffected and unchanged in most projects to date.

Beyond this evaluative work, we can draw on the emerging discussion of collaboration in the organization theory literature for added insights into the problems of service-coordination in schools. Among these we emphasize that (a) the public school is a complex and intricate web of competition and collaboration, with some difficult workplace issues implicated in a re-balancing of these values; (b) service-coordination in schools is likely to require some fundamental changes in the allocation of professional control, within an administrative culture of quite separate control-interests and distributed control; and (c) the coordination of children's services must battle a "marketplace" of incentives in schools that has long protected "territorialism." Furthermore, in the negotiation of changes in incentives to support collaboration, there are both gains and losses between "stakeholders" approaches and other methods for fostering professional integration.

Finally, moving from the theoretical literature to a more policy-oriented level of discussion, this review highlights (a) the importance of weighing alternative models toward *connections* between schools, clients, and collaborators; (b) the importance of a carefully conceived strategy for a *new professionalism* around service-coordination; (c) the value of central attention to the *support threshold* behind collaboration, including such elements as risk allocation and stewardship; and (d) the possible additional importance of *changing governance structures* in schools to better support service coordination.

In conclusion, although exciting developments are occurring in coordinated services ventures, we still have minimal systematic research on the deeper organizational issues implicated in children's services coordination. To be sure, as noted earlier, program experimentation is going forward rapidly across the nation and, out of this experience, an increasingly sophisticated sense of "what works" and "what doesn't" is emerging (Behrman, 1992). It is questionable, however, whether case-by-case experimentation will provide sufficient lessons on the "deep-structure" or *institutional* changes that may well be necessary for maximizing services coordination. Such changes, as March and Olsen (1984) suggest, might require insights into the very "order" that institutions separately impose upon their "inchoate worlds"--including such diverse institution-defining elements as collaborator conventions, rituals, symbols, career-ladders, time-allotments, reward and control systems, role obligations, rules, SOP's, and normative structures. Thus, as we suggested at the outset, many institutional shoals and sandbars still lurk hidden below the surface while arks aplenty are under sail.

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Part IV

ECOLOGICAL AND CONTEXTUAL FACTORS THAT IMPACT ON INNER-CITY CHILDREN AND FAMILIES

Twelve:

DETERMINANTS OF STUDENT EDUCATIONAL EXPECTATIONS AND ACHIEVEMENT: RACE/ETHNICITY AND GENDER DIFFERENCES

Leo C. Rigsby, Judith C. Stull, and Nancy Morse-Kelly

INTRODUCTION

This chapter addresses the question of whether the academic experiences of adolescents from different racial/ethnic and gender groups differentially affect the schooling outcomes and performances of these groups in U.S. schools. The authors' approach is comprised of two stages. First, they determine whether a single explanatory model is sufficient to assess distinct racial/ethnic and gender groups; they then consider the similarities and differences among the academic experiences--particularly expectations for success and access to specific school programs and resources--of these groups.

The primary model for analyzing inequalities in educational outcomes is the status attainment model, which was developed in large part by sociologists at the University of Wisconsin in the 1960s (Sewell & Hauser, 1980). The model was constructed and enhanced using data from predominantly white male subsamples (Alexander & Eckland, 1974; Alexander, Eckland, & Griffin, 1975; Duncan, Haller, & Portes, 1968; Haller & Portes, 1973; Sewell, Haller, & Straus, 1957; Sewell & Shah, 1967, 1968a, 1968b). In fact, Sewell and Hauser (1980) reported that the Wisconsin data included less than 2% nonwhites. Many of the initial publications based on this data focused on white males because of researchers' original concern with low aspiration and achievement levels among farm-reared, Wisconsin boys. Sewell and Hauser have suggested that continued emphasis on a white, male population may be due to the homogeneous focus in these early articles by Wisconsin scholars.

In the middle 1970s, other scholars sought to extend the Wisconsin model to include women and racial/ethnic minority populations, in particular African Americans. A number of these scholars reported that the basic Wisconsin model better explained educational expectations and attainments for white males than for women or minority males. Using data sets that did not include the full range of race/ethnicity or gender types, researchers found the model explained less variance and exhibited complex statistical interactions (Alexander & Eckland, 1974 [females]; Hout & Morgan, 1975 [African Americans and females]; Kerkhoff & Campbell, 1977 [African-American males]; Porter, 1974 [African Americans]; Portes & Wilson, 1976 [African Americans]; Treiman & Terrell, 1975 [African Americans and females]). Even the major analyses of the High School and Beyond data (Alexander & Pallas, 1985; Coleman & Hoffer, 1987; Coleman, Hoffer, & Kilgore, 1982; Hoffer, Greeley, & Coleman, 1985; Jencks, 1985; Willms, 1985) shed little light on the effects of race/ethnicity and gender on schooling outcomes as race/ethnicity and gender were not treated as variables that warranted further exploration because of their intrinsic value, but were viewed as phenomena to be eliminated through statistical control.

Other researchers began to address the relative lack of success in applying the Wisconsin model to the different patterns of schooling outcomes of nonwhite and/or nonmale students. This literature, mostly ethnographic in approach, focused explicitly on schooling outcomes among women and minorities, and on the complex interactions between the schooling processes and family background/cultural processes of African Americans and other minority groups (Grant, 1984; Ogbu, 1981, 1986, 1987; Ogbu & Matute-Bianchi, 1986; Peshkin, 1991; Schofield, 1989; Weis, 1990).

Only recently have researchers begun to combine insights from the ethnographic tradition with the methodological rigor of the status attainment tradition. Though the populations they utilized were limited, Lawrence Steinberg, Sanford Dornbusch, and Bradford Brown, along with their numerous collaborators, have made major contributions to this effort (Dornbusch, Ritter, & Steinberg, 1991; Dornbusch, Steinberg, & Ritter, 1990; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, 1986; Steinberg, Dornbusch, & Brown, 1992; Steinberg, Lamborn, Dornbusch, & Darling, 1992; Steinberg & Silverberg, 1986; Steinberg et al., 1988). These researchers have enacted data sets that allow the study of student-peer and student-family processes in a small number of ethnically diverse schools. Their research has explored the effects of differences among ethnic/racial groups in (a) parent perceptions of the value of student success in the classroom; (b) conflicts between parent and peer pressures relating to school performance; and (c) the relationships between parenting practices and adolescent educational achievement. The research findings of Steinberg and his colleagues support Mickelson's (1984, 1990) argument that the expectation/achievement paradox for African-American children (high educational expectations despite low school achievement) can be accounted for by the discrepancy between abstract values (that is, the commonly-held belief that people can get ahead by hard work and education) and concrete values (that is, the personal belief that someone like myself cannot get ahead by hard work and education).

The present research combines and enhances the ethnographic and status attainment traditions, broadening their dual focus to include diverse racial/ethnic and gender groups so that direct intergroup comparisons can be made.

Theoretical Background

This chapter builds on several relevant known facts: that family and peer interaction processes, differential access to school programs and resources, the development of skills and the acquisition of knowledge, and the accumulation of success/failure experiences in school all affect the educational outcomes of adolescent students. It is reasonable to believe that some of these processes may operate differently among diverse analytic categories.

The authors have anticipated the criticism that scientific procedure often prefers the most parsimonious model for analyses of this sort. Clearly this was the mind-set that led researchers to apply the status attainment model of the 1960s to other data sets and samples, and to interpret results that show some differences as largely convergent with the dominant model (see Featherman & Hauser, 1976a, 1976b; Treiman & Terrell, 1975). There is a delicate balance, however, between emphasizing differences and emphasizing similarities in the analysis of social phenomena; generalization often glosses over the former while focusing solely on the latter.

While there has been a recent emphasis on race and gender differences in postmodern and cultural-identity projects, a major challenge for women and racial/ethnic minorities still remains: to question the fundamentally reductionist character of the dominant research model. For a variety of reasons, that model has deemphasized structural processes affecting aspirations and achievement (that is, differential socialization and expectations, differential access to education and/or work, and differential evaluation processes in educational and work settings) that critics believe are important to understanding schooling and work experience. The pressure to recognize and validate the different experiences of women and minorities has, as its logical extreme, the stance that every case or instance is unique and that there can be no generalization. Some balance, therefore, is needed between over-generalization and extreme specificity.

Several explanations have been posited to account for differences among the educational expectations and achievement of varying racial/ethnic and gender groups. Differential levels of family poverty most directly apply to racial/ethnic minorities. Studies have shown that higher levels of poverty among African Americans can account for some of the achievement differences relative to whites. Variations in school district expenditures can also have this effect since the wealthier districts can offer greater technology and a richer menu of advanced-level courses.

At the school level, Yancey and Saporito (1995) found that elementary schools with high levels of poverty and racial isolation and high student turnover rates have much lower levels of average achievement than could be accounted for by the linear additive effects of these conditions. Such cumulative processes may work on the individual level as well. If several factors affect educational achievement and educational development, then one or two negatives could be offset or balanced by one or two positives. On the other hand, a preponderance of negatives may create an interactive composite that is difficult if not impossible to overcome or counteract.

Parenting practices that support educational achievement have also been shown to reflect expectation/outcome differences among varying race/ethnicity and gender groups. Yao (1985) argued that the highly structured family life of Asian Americans accounts for their high achievement rates. Steinberg and his associates showed that the parenting practices that are the most effective in supporting school performances evidence racial/ethnic differences. Parenting practices that result in high achievement among white, middle-class students (for example, see Dornbusch, Ritter, & Steinberg, 1991; Steinberg, Dornbusch, & Brown, 1992) are different from those that are successful among African-American students (for example, see Taylor, 1994; Taylor & Roberts, 1996).

Taken together, these explanations argue that educational achievement and development among female and minority adolescents may be representative of the skills and knowledge each student brings to his/her developmental context. There is continuity in educational achievement because there is continuity in the structures and processes that affect it. This implies that if race and gender structure the educational experiences of adolescents, these variables must be incorporated into the framework that explains their educational development and achievement.

Methods

This chapter uses data from the National Educational Longitudinal Survey of 1988 (NELS:88) to explore race/ethnic and gender similarities and differences in patterns of student educational expectation and achievement patterns using two-stage least square regression analysis to compensate for the posited simultaneous relationship between the two variables.

NELS:88 is the third of a series of national longitudinal studies of adolescent educational development conducted under the aegis of the U.S. Department of Education. The NELS:88 study began in 1988, with a national sample of 24,599 eighth-grade students drawn from public, religious, and private (nonreligious) schools. Students have been contacted every two years and will continue to be contacted until they graduate from college and/or enter the labor force. The present research focuses on those students who participated in both the 1988 (base year) and 1990 (first follow-up) surveys. Because of their very small numbers, Native Americans were excluded, as were students who dropped out of school. Interestingly, students who dropped out of school by the end of 10th grade were evenly distributed across the eight analysis groups. To account for sampling effects, all data were weighted according to NCES specifications (that is, using the panel weight divided by the mean of that weight).

The traditional strategy of representing the effects of race/ethnicity and gender on student expectations and achievement by including dummy variables in the equations was initially tested, but was found to be insufficient to capture the issues of concern in this chapter. Instead, students were separated according to their race/ethnicity and gender into eight groups (male and female Asians, Latinos, African Americans, and whites) and separate analyses were conducted for each group.

Variables

The study's dependent variables included student scores on the standardized test of mathematics achievement given in 1990, and student educational expectations in 1990. The mathematics test was chosen in order to lessen the effect of a non-English speaking, non-American background among the student population. The test was timed and was comprised of 40 questions which assessed various levels of mathematical skills and knowledge. Three different forms of this test were given in the first follow-up, with a more difficult form given to those scoring in the highest quartile on the base year test and a less difficult form given to those scoring in the lowest quartile. The middle two quartile scorers received the "regular" form. The NCES-provided IRT scores were used to ensure that the comparisons drawn among all students were equivalent. These scores represent the dependent variable in the first regression analysis (see Table 12.2). The students' educational expectations, which were ranked according to the number of years of educational experience associated with each category (that is, high school graduate = 12 years; college graduate = 16 years, and so forth) represent the dependent variable in the second analysis. The questions on which measures were based are described in greater detail in Appendix.

Family Influence Measures

NCES created a measure of family socioeconomic status (SES) from student questionnaire data on parent education and occupation, family income, and possessions. Probably the most consistent finding in the literature of the sociology of education has been the positive relationship between SES and educational achievement.

In addition to SES, parental support has generally been shown to be important to the well-being of adolescents, with "proper support" promoting educational achievement. "Proper support" may vary from group to group, depending on the maturity and self-monitoring capacity of the adolescent. For some students, the most consistent support system seems to be general monitoring (some rules and high performance expectations) that excludes direct intervention in homework and/or tight behavioral control. The latter were found to be inconsistent with the development of adolescent responsibility and self-monitoring (Steinberg et al., 1988). On the other hand, Taylor (1994) and Brown et al. (1993) have argued that appropriate parenting practices also vary within the family's social context. Neighborhoods with high levels of drug use and/or teen violence may elicit greater parent monitoring and control. In less threatening environments, tight control and detailed intervention seem to indicate that school performance and/or behavior are already problematic. That is, to some extent the schooling and social behaviors of children and adolescents mandate support/control from parents. Parents optimally support but do not control where children are developing within the typical bounds of acceptable behavior. They often intervene after the fact, when social behavior or educational achievement fall outside the typical bounds of acceptability.

The weighted scale *Parental Involvement* was constructed from data regarding ways in which parents were involved in their child's high school. Going to a school event (for example, a baseball game or school play) was given the least weight, and volunteering in school the highest. A positive correlation was expected between the level of parent involvement and student educational achievement and expectations.

The dummy variable *Mom Expects College* was used to determine what level of education the target student believed his/her mother expected him/her to attain. Using the number of years of education either parent expected did not prove significant, but this variable, which focused specifically on maternal expectation, did. As Smith (1989) found, fathers' expectations do not factor significantly into student expectations or achievement. A positive relationship was anticipated between student expectations and achievement and maternal expectations.

Peer Pressure Measures

Since the early 1960s, when Coleman's (1961) *The Adolescent Society* was published, researchers have been studying the effects of peer group processes on the schooling commitments and performances of adolescents. A number of studies have reported on the contextual effects of peers--that is, relationships between middle class peers (Coleman et al., 1966; Sewell & Armer, 1968). However, few have documented the kinds of direct interpersonal influences from peers that many parents seem to fear or aspire to for their children (Epstein & Karweit, 1983). Nevertheless, there is substantial intuitive appeal to the notion that peers affect and reinforce both positive and negative schooling behaviors (Rigsby & McDill, 1972). The present study explored a number of different measures of peer influences and found that only one had any systematic effect on educational achievement.

The scale *Nonacademic Peer Pressure* was constructed from student reports on the social priorities of their friends (the importance of athletics, dating, attending parties, and so forth). This variable measured peer support for nonacademic activities and Coleman's logic suggested a negative effect.

Influences of Other Adults

The counted scale *Number of Others Who Expect College* was modeled after a component of the Wisconsin studies which documented the importance of adult influence on student expectation and achievement. Students were asked to choose from a pool of seven significant adults (parents, favorite teachers, coaches) to determine who, in the student's opinion, wanted him/her to attend college.

Students' Values Relating to Future Success and School Commitment

The sociology of education has long argued that personal values and ambition play a key role in developing the commitment and self-discipline necessary to achieve academic success among adolescents who, entering an age where they have some degree of autonomy, can treat school as either a serious obligation or a distraction to be avoided. While not wishing to be reductionist about educational achievement, the authors of this chapter have included several measures of students' personal commitments and values which may stem from home and school experiences and peer interactions.

The scale *Want Good Life* was used to measure students' optimism about his/her future economic and social successes. A positive relationship between this measurement and student educational performances was anticipated.

The scale *Belong in HS* measured the degree to which students felt they belonged in high school and was used as a measure of school engagement. A positive correlation was expected.

Locus of Control was constructed by NCES from items in the student survey and measured the extent to which each student felt in control of his/her life. A positive relationship was expected.

Students' School-Related Behaviors

Specific behaviors and habits relating to school work were also important determinants of school performances. Number Hours of Homework/Week measured the average number of reported hours that students spent per week on their homework. Time spent on homework was expected to be positively related to academic achievement.

School-Related Opportunities and Attitudes

In Public School was a dummy variable that indicated whether the student attended a public school at the time of the follow-up survey. Most of the students in the study (74.9%) were in public schools in 1990. Based on previous research (Coleman, Hoffer, & Kilgore, 1982), public school enrollment was expected to lower educational achievement.

In Vocational HS Program and *In Academic HS Program* were used as dummy variables for, respectively, students enrolled in vocational programs and in academic programs in high school. Membership in the general high school program, the largest category, was excluded and comparisons were made to that group. Enrollment in either of the named programs was expected to enhance student performance relative to the general program--the nonspecific residual category. The effect was expected to be more pronounced for those in the academic programs.

Teachers Are Okay measured students' assessments of the quality and caring of teachers in the high school. This measure was expected to be positively related to educational achievement.

Another factor that was expected to add to the model for mathematics achievement was an indicator of whether students were in the "fast track" for mathematics (prealgebra in seventh grade, algebra in eighth grade, geometry in ninth grade, and algebra II in tenth grade). A dummy variable, *8th-Grade Advanced Math*, was included student questionnaire asking whether students were in advanced math courses in eighth grade. This variable was expected to be positively related to mathematics achievement.

Different Resources: Means

Table 12.1 delineates the means/standard deviations (for interval variables) and proportions (for dummy variables) for the varying student groups and reveals significant differences in student resources and access to education between males, females, and minority students. A simple F test (the results of which are not given in the table) of the means and proportions in Table 12.1 shows that, for each measure, the means differed significantly across the eight groups. The tenth-grade math scores evidenced the greatest range of differences. Asian students had the highest mean scores and African-American students the lowest. Indeed, on the average, Asian students scored 12.6 points higher than their African-American counterparts, a difference greater than in the eighth-grade mathematics tests (9.5 point difference), but less than in the twelfth-grade exams (18.05). The patterns were similar for both males and females.

Despite these test score differences, there was only a one-year difference in educational expectations (*Expected Years' Education*). One might ask upon what do students base their expectations if not academic achievement? The discussion of the study's two-stage regression analysis later in the chapter will help answer this question, and will also address the lack of a one-to-one relationship between educational expectations and performance on the mathematics test.

Although the differences among groups in means and proportions were subtle, some patterns warranted closer attention. Greater differences appeared among the racial/ethnic minority groups rather than across gender categories. On the average, Asian and white students appeared to be similar in patterns of means, while the patterns of means for Latino and African-American students were similar. For some variables--optimism/desire for future material goods (*Want Good Life*), loci of control, positive attitudes toward teachers (*Teachers Are Okay*), and mothers' expectations for college (*Mom Expects College*)--the groups had virtually the same means or proportions. In other respects, the groups were highly dissimilar. Indeed, as one might expect, students of Latino or African-American descent were generally more disadvantaged than Asian or white students in terms of personal, family, and school resources. That is, Asian and white students reported higher family socioeconomic status (SES); positive personal values (for example, school engagement as measured by the *Belong in HS* scale), and more hours devoted to homework (*Number Hours Homework/Week*). Additionally, students of Asian or white backgrounds were more likely than Latino or African-American students to be enrolled in selective, mobility-oriented curricular options. Asian and white students tended to be involved in advanced academic programs (*In Academic HS Program*), enrolled in advanced math classes (*8th-Grade Advanced Math*), and/or attending private schools (*In Public School*). African-American students, on the other hand, were more likely to be enrolled in vocational programs (*In Vocational HS Program*). In addition, Asian and white sophomore students had higher standardized test score averages (*10th-Grade Math Score*) than sophomores of Latino or African-American descent.

Using the same data to make gender comparisons, female students scored higher than male students in encouragement to attend college (*Number Others Expect College*), school engagement (*Belong in HS*), hours spent doing homework (*Number Hours Homework/Week*), qualitative assessment of teachers (*Teachers Are Okay*), and nonenrollment in the vocational track (*In Vocational HS Program*). Female

Table 12.1
Means/Proportions and Standard Deviations of Included Variables

	Male								Female							
	Asian		Latino		Afr. Amer.		White		Asian		Latina		Afr. Amer.		White	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Parental involvement	4.14	3.7	3.95	3.7	4.42	3.9	5.08	3.7	3.81	3.5	3.83	3.4	4.58	3.7	5.02	3.5
SES	.22	.9	-.46	.8	-.38	.8	.19	.7	.26	.9	-.54	.8	-.41	.8	.15	.8
Mom expects college*	.89		.86		.84		.87		.91		.84		.87		.88	
Nonacademic peer pressure	12.38	2.4	12.33	2.6	12.77	2.7	12.14	2.5	12.85	2.0	12.17	2.4	12.16	2.3	12.27	2.3
No. others expect college	4.19	2.4	3.38	2.5	3.49	2.4	3.59	2.6	4.26	2.1	3.46	2.3	3.71	2.2	3.71	2.3
Belong in HS	4.35	1.8	3.82	2.1	3.84	2.1	4.25	1.8	4.53	1.6	4.12	1.8	4.11	1.8	4.44	1.6
Want good life	34.14	3.4	32.68	4.2	32.73	3.8	32.76	3.7	33.21	3.1	32.39	3.9	32.82	3.8	32.87	3.4
Locus of control	.00	.6	-.01	.6	-.01	.6	.03	.6	.01	.6	-.03	.6	.00	.7	.07	.6
Hrs. homework/wk.	9.22	7.6	6.53	6.0	5.41	5.1	7.55	6.5	10.50	7.2	7.03	5.7	6.26	5.5	8.71	6.7
Teachers are OK	4.73	1.5	4.52	1.6	4.34	1.6	4.40	1.7	4.86	1.4	4.63	1.6	4.51	1.5	4.51	1.6
In academic HS program*	.45		.27		.26		.36		.49		.27		.31		.39	
In vocational HS program*	.09		.14		.20		.11		.07		.12		.16		.07	
In public school*	.85		.93		.92		.84		.85		.93		.90		.85	
8th-grade advanced math*	.43		.19		.19		.28		.44		.21		.22		.28	
10th-grade math score	42.4	12.9	32.5	11.2	29.8	10.3	39.0	12.2	42.7	10.7	31.4	10.5	29.9	11.1	38.7	11.2
Expected years education	16.52	2.4	15.10	2.4	15.26	2.3	15.46	2.3	16.91	2.3	15.43	2.6	15.90	2.7	15.86	2.3

* = proportion

Table 12.2
Two-Stage Least Squares Regression Coefficients for the Effects of Family, Peer, and Student Behaviors and Attitudes on Sophomore Mathematics Test

	Male				Female			
Variable	Asian	Latino	Afr. Amer.	White	Asian	Latina	Afr. Amer.	White
Parental involvement	-.3204*	-.1681	-.1883	-.0238	-.3664*	-.0520	-.1758	-.0372
SES	2.9020*	2.1413*	2.2952*	2.3938*	3.7089*	2.0774	2.4682*	2.9732*
Nonacademic peer pressure	.5427*	.2781	.0477	.4963*	.2115	.1697	.0424	.2615*
Belong in HS	-.2110	.1350	.3139	-.0265	.6427	.1024	-.0872	.0717
Locus of control	1.0215	1.4255*	2.6974*	1.0548*	1.0621	1.4659*	2.1802*	1.0073*
Hrs. homework/wk.	.1994*	.1564*	.1056	.1797*	.3817*	.2351*	.3111*	.2051*
Teachers are OK	.5734	.0402	-.0442	.5931*	.5675	.1971	.7244*	.2913*
In academic HS program**	3.6909*	4.3631*	3.1266*	2.7705*	3.0572*	4.9039*	3.6842*	2.5204*
In vocational HS program**	-2.0256	-.1114	-2.0725*	-2.3677*	-6.7784*	-1.6150	-2.0929*	-2.3296*
8th-grade advanced math**	6.2499*	4.3990*	6.7439*	5.8168*	6.2536*	5.3621*	6.5598*	6.3185*
Expected years education (predicted)	1.5980*	1.4556*	1.1556	1.4193*	-.3960	.9452*	.8654	1.3733*
Constant	2.7242	5.0755	9.5461	3.8293	34.0238	10.5951	10.1147	7.6073
R square	.4904	.3142	.3268	.3696	.4090	.3568	.4194	.4251

* = $p < .01$
** = dummy variable

Table 12.3
Two-Stage Least Squares Regression Coefficients for the Effects of Family, Peer, and Student Behaviors and Attitudes on Sophomore Mathematics Test

	Male				Female			
Variable	Asian	Latino	Afr. Amer.	White	Asian	Latina	Afr. Amer.	White
Parental involvement	.0109	.0112	.0036	.0135*	.0296	.0224	.0393	.0251*
SES	.1192	.2027	.3774*	.4835*	.5603*	.4329*	.3585*	.4209*
Mom expects college*	-.0911	-.0268	.3644	.5539*	.1458	.2834	.6130*	.5789*
Nonacademic peer pressure	-.0696	.0163	-.0167	-.0093	-.0127	.0416	.0486	.0265*
No. others expect college	.1065	.1851*	.1867*	.1293*	.1112*	.2772*	.1950*	.1133*
Belong in HS	.0473	.0380	.0094	.0525*	.0986	.0400	.0527	.0724*
Want good life	.1482*	.1689*	.1093*	.1206*	.1588*	.1260*	.1514*	.1456*
Locus of control	.3201	-.0592	.3664*	-.1475*	.0582	.3173*	.0763	.2274*
In academic HS program*	.1028	.4123	.1988	.3044*	.2547	.0366	-.2421	.3941*
In vocational HS program*	.3637	-.1238	.1805	-.0214	-.3658	-.0785	-.2624	-.2121
10th-grade math test score (predicted)	.1224*	.0965*	.0552	.0806*	.0687*	.0858*	.0949*	.0609*
Constant	6.6089	5.4841	9.4777	6.9934	7.4854	6.9784	6.1355	6.7890
R square	.3694	.3968	.3021	.4509	.3467	.3647	.3216	.4000

* = $p < .01$

Table 12.4
Beta Coefficients from Two-Stage Least Squares Regressions for the Effects of Family, Peer, and Student Behaviors and Attitudes on Sophomore Mathematics Test

	Male				Female			
Variable	Asian	Latino	Afr. Amer.	White	Asian	Latina	Afr. Amer.	White
Parental involvement	-.0961	-.0552	-.0656	-.0069	-.1180*	-.0165	-.0562	-.0115
SES	.1998*	.1475*	.1645*	.1432*	.2984*	.1472*	.1686*	.1973*
Nonacademic peer pressure	.1069*	.0640	.0114	.0997*	.0389	.0377	.0085	.0527*
Belong in HS	-.0263	.0207	.0498	-.0034	.0826	.0142	-.0116	.0089
Locus of control	.0483	.0852*	.1601*	.0535*	.0581	.0882*	.1273*	.0539*
Hrs. homework/wk.	.1225*	.0822*	.0487	.0937*	.2442*	.1263*	.1549*	.1207
Teachers are OK	.0705	.0056	-.0063	.0799*	.0711	.0284	.0980	.0419*
In academic HS program*	.1501*	.1735*	.1285*	.1086*	.1400*	.2051*	.1523	.1090*
In vocational HS program*	-.0459	-.0033	-.0753	-.0587*	-.1578*	-.0500	-.0670	-.0525*
8th-grade advanced math	.2532*	.1516*	.2428*	.2188*	.2844*	.2067*	.2439*	.2508*
Expected years of education (predicted)	.3164*	.3107*	.2378	.2773*	-.0843	.2294*	.2027	.2855*
R square	.4904	.3143	.3264	.3956	.4090	.3568	.4194	.4251

* = $p < .01$

Table 12.5

Beta Coefficients from Two-Stage Least Squares Regressions for the Effects of Family, Peer, and Student Behaviors and Attitudes on Educational Expectations in Sophomore Year

Variable	Male				Female			
	Asian	Latino	Afr. Amer.	White	Asian	Latina	Afr. Amer.	White
Parental involvement	.0165	.0172	.0061	.0286*	.0442	.0294	.0538	.0373*
SES	.0420	.0651	.1304*	.1531*	.2110*	.1260*	.1049*	.1342*
Mom expects college*	-.0117	-.0038	.0591	.0791*	.0177	.0401	.0775*	.0805*
Nonacademic peer pressure	-.0695	.0175	-.0192	-.0098	-.0110	.0378	.0420	.0257
No. others expect college	.0977*	.1849*	.1908*	.1411*	.0987*	.2328*	.1578*	.1113*
Belong in HS	.0299	.0275	-.0073	.0358*	.0599	.0229	.0305	.0434*
Want good life	.2021	.2961*	.1839*	.1875*	.2146*	.1864*	.2074*	.2072*
Locus of control	.0769	-.0166	.1046*	.0397*	.0150	.0783	.0192	.0584*
In academic HS program*	-.0212	.0769	.0393	.0631*	.0551	.0063	-.0427	.0820*
In vocational HS program*	.0424	-.0172	-.0316	.0028	-.0406	-.0098	-.0358	-.0229
10th-grade math test score (predicted)	.6185*	.4569*	.2648	.4276*	.3217*	.3513*	.4048*	.2939*
R square	.3694	.3970	.3021	.4509	.3467	.3646	.3216	.4000

* = $p < .01$

students had lower average mathematics test scores as sophomores than boys (*10th-Grade Math Score*), but generally had higher average educational aspirations (*Expected Years' Education*).

It is important to note a number of race/ethnicity and gender interaction patterns. Regarding the resources and experiences discussed above, Latino and African-American males were often in an unusually disadvantaged position relative to other groups and were less engaged in school (*Belong in HS*), had lower expectations for future success (*Expected Years' Education*), and spent less each day on homework assignments (*Number Hours Homework/Week*). Thus, certain personal support systems important to the positive educational development of adolescent students were lower for Latino and African-American males than for other groups.

To summarize, the analytic groups delimited for this analysis exhibited important differences in family supports, personal values and behaviors, schooling experiences, and schooling outcomes. Some of these differences were patterned systematically along race and gender lines, while others represented interactions of a more complex nature. Some questions, however, remain. Although conditions of risk, access to schooling experiences, and family supports were different for these analytic groups, were the models different as well? And were the determinants' educational aspirations and outcomes different also? The circumstances that structure different schooling processes are addressed in the regression analyses presented in Tables 12.2 and 12.3.

Different Educational Processes

The model underlying the analyses presented in Tables 12.2 and 12.3 builds on the status attainment tradition, which, in a sense, represents a baseline model of student educational achievement and expectations. It posits that adolescents want to do as well as they can in school, that they want to attain the highest level of education they can to maximize their potential earning power and occupational success, and that their families will support such efforts as much as they are able. The model also assumes that personal academic values and commitments, parental and peer schooling support, positive school experiences, extent of work expended, and the existing store of school skills and knowledge account for successful performances.

Why conduct two-stage least squares regression analyses? In the past, studies on educational achievement and expectations among students have tended to explain the relationship between expectations and achievement in two ways: achievement as a function of expectations, as in the case of the Wisconsin model, or expectations and aspirations as a function of achievement patterns and other, related variables. One difficulty with these oppositional approaches is that a simultaneous relationship is likely to develop between the two variables. The authors believe that test scores shape aspirations, with high levels of achievement leading to greater student expectations, and that aspirations, in turn, affect test scores. Students with high aspirations take learning and academic tasks more seriously, and are more likely to have higher scores. Hout and Morgan (1975) and Summers and Wolfe (1977), among others, have emphasized the mutual relationship between student aspirations and expectations in their research.

If such a simultaneous relationship between these two variables does indeed exist, the regression coefficients produced in an ordinary least squares regression analysis would be biased and inconsistent. One way to address this problem is by doing a two-stage least squares regression analysis. This approach yields estimators that are consistent, but still biased--that is, estimators whose bias diminishes as N gets larger. In a two-stage least squares analysis, two regressions are estimated, but only the second is analyzed. In the data presented in Table 12.2, all the independent variables are included in the first stage and the educational expectations serve as the dependent variable. A new variable is created which, in our example, is represented by the predicted educational expectations, and these predicted scores are then entered in the second stage as an explanatory variable. This procedure eliminates the posited simultaneous relationship between the two variables, educational expectations and test scores (Gujarati, 1988).

It should be noted that three variables were dropped from the analysis. The base year (eighth-grade) reading/math test scores were initially included as measures of academic performance, but were later dropped because they were too highly correlated with the tenth-grade results. This is not unexpected given the way the Educational Testing Service constructed the variables. Grades from the base year also were excluded because they had not been standardized for lack of consistency between schools. In addition, the analysis was not concerned with whether students attended public or private schools, since this variable never proved significant for any of the groups in either of the analyses.

Mathematics Achievement

In Table 12.2, academic achievement as measured by students' tenth-grade mathematics test scores (*10th-Grade Math Test Score*) represents the dependent variable. Different data in this table suggest that the authors' strategy of examining explanations of achievement and educational aspirations separately for each analysis group is fruitful. Differences in the R Squares indicate that the underlying model works differently for different groups; that is, the adequacy of the common model to account for achievement and aspirations varies across the groups. This conclusion is further bolstered by considering the differences in the direction and magnitude of the regression coefficients. Also, the lack of patterns consistent for ethnic and gender groups gives no support for a simplistic, biologically deterministic model.

If statistical significance is ignored and only the sign and rough magnitude of the coefficients are examined, common elements that explain educational achievement among minority and female students emerge. In the present study, effects of family SES, enrollment in an academic high school program (versus a general program), enrollment in advanced mathematics in eighth grade, number of hours spent on homework per week, and having a sense of controlling one's destiny all contributed positively to student achievement. Enrollment in a vocational program (versus a general program) and parental involvement contributed negatively to student achievement for all groups. Though the results for parental involvement are not what was originally predicted, this is not unusual given the ambiguities in relevant literature. As noted above in the discussion of family influence measures, there is a tension at the high school level between granting sufficient autonomy for routine growth and development and providing sufficient monitoring to assure safety and security. The effects of parental involvement here are net of family background, educational expectations, and so forth. It is reasonable to account for the negative effects of parental involvement by suggesting that this residual effect net of the other variables is the result of poor performance eliciting greater parental involvement rather than parental involvement affecting performance negatively. Of course, to the extent that greater parental monitoring creates conflict between adolescents and their parents, a negative effect may result.

For all groups, enrollment in (and having access to) advanced math curricula in eighth grade and participation in academic programs in high school were very important predictors of high performance on the mathematics test. Among African-American adolescents, participation in advanced mathematics in the eighth grade was the most important predictor of performance on the mathematics test. The unstandardized coefficient is significant for this group, since this variable has the largest Beta value for African-American males. This is not surprising since eighth-grade placement determines student access to advanced mathematics curricula in high school. This result is particularly significant in light of the widely documented fact (Oakes, 1985) that minority/poor children are more likely to be assigned to lower academic tracks or special education tracks than middle class or white children. If African-American adolescents do not have the same access to advanced mathematics classes (controlling for past performance) as other students, their mathematics achievement is inevitably and significantly dampened. For African-American males and females and for Asian females in the study, the relationship between educational achievement (test scores) and educational expectations was not statistically significant.

Turning back to Table 12.2, there are three elements that support the argument for separate group analyses. First, the fit of the model (R-square) varies across the groups; this is a common finding. Second, variations in the relative magnitudes of Beta coefficients (given in Table 12.4) occur across groups, indicating that different explanatory variables have different degrees of importance for different groups. Third, regressions carried out with the entire NELS:88 sample that ignore individual groups discount the variations in sign and magnitude of coefficients from the group analyses. In addition, these regressions confound differences in the distributions of the independent variables across groups with variations in these variables within groups.

Table 12.4 indicates where Betas for the equations reported in Table 12.2 are given. For five groups, excluding African-American students and Asian girls, the strongest predictor of mathematics performance was the variable *Expected Years of Education*. The strongest predictor of mathematics achievement among African-American students, as noted above, was participation in advanced mathematics in the eighth grade. The *Locus of Control* variable was a strong predictor for test performance among Latino students and African-American students and is one of the top five highest Betas in the equations contained in Table 12.4. Since many Latino and African-American students are subject to negative stereotyping, ethnic discrimination, and negative peer influences, it is likely that each of these groups needs an especially strong sense of personal efficacy to succeed in school.

Taken together, these patterns point to the relevance of the aspirations/achievement paradox (Mickelson, 1990). Being a "good" student (signified by relatively high scores on the mathematics test) affects educational expectations for some of these groups, but not all. It should be emphasized that differences in social class cannot explain the different effects of educational expectations across groups, since SES was included in the equation and was significant for each group.

Socioeconomic status was the most important predictor of test performance for Asian girls while educational expectations was the most important predictor for Asian boys. These two results suggest that in Asian families, where cultural and economic resources are limited, sons receive preferential treatment in access to education. Where resources are plentiful, daughters receive support as well. Among Asian boys and girls, parental involvement had a significantly negative effect on mathematics performance. These are the only cases in which parental involvement had a significant effect.

A final point is in order regarding the estimation of different models for the different groups: these models were compared with results from a pooled regression in which groups were ignored (these data are not shown). The order of importance of variables was necessarily different from the diverse individual equations. Socioeconomic status was the most important predictor (largest Beta) in the pooled equation and predicted educational expectations dropped to third place. In the individual group equations, the educational expectations variable was either the most important or second most important predictor of educational achievement in seven of the eight groups. Other analyses revealed that socioeconomic status varied more among these groups than any other variable. About 10% of the variation in socioeconomic status and slightly more than 2% of the variation in predicted educational expectations were between groups. Clearly, some of this difference between groups is reflected in (confounded with) the larger effects of socioeconomic status in the pooled equation.

Educational Expectations

Table 12.3 provides data illustrating the variable *Expected Years of Education* as a function of personal and social influences. Here again there is evidence relevant to the issue raised at the beginning of the chapter, namely whether a single model is sufficient for understanding schooling performances. Ignoring statistical significance and attending to sign and gross magnitude, common elements of a model emerge. As Table 12.3 shows, family social class, nonparental adults encouraging the student to go to college (*Number Others Expect College*), predicted mathematics performance, and optimism for future material gains (*Want Good Life*) were all positively correlated with educational aspirations in the study. Enrollment in a vocational high school program was predominantly negatively related. These effects make sense in terms of social learning and socialization theories. Uniformly, the most important predictor (highest Beta) for all groups was predicted mathematics performance (see Table 12.5).

Once again, there seem to be some notable differences between the groups. Among minority males, social integration in the high school (*Belong in HS*) either added little or was negatively correlated to educational expectations, while for white boys and girls, this correlation was positive, African-American males, the effects of the variable *Locus of Control* were positive and significant. For white students, enrollment in the academic program had strong positive effects, but these effects were less important (and nonsignificant) for other groups. For whites and African Americans, maternal encouragement to attend college (*Mom Expects College*) had a positive and significant effect on student achievement, but was not positive for Asian and Latino boys and was not significant for Asian and Latino girls.

Again, these results support the argument that analyses of adolescents' schooling performances ought to be done separately for gender and ethnic/racial groups. While the pattern of Betas for the pooled regression does not show changes in the order of importance of variables, it does mask the differences across groups discussed above.

CONCLUSION

The most important results of this study show the overriding importance of student access to advanced mathematics curricula beginning in the eighth grade. The skeptic may suggest that results merely reflect a sympathetic effort by school staff to prevent young people who may not perform well in advanced mathematics classes from the frustration of failure, and to steer them toward "more appropriate" curricular choices. The problem with such a strategy is that it closes doors to learning opportunities that cannot easily be reopened. Evidence suggests that decisions to grant or limit access to advanced mathematics curricula are often made to reflect the convenience of scheduling by school staff or to preserve elite classes for the most cooperative and well-behaved students (Useem, 1990, 1991). If our society is serious about the need to preserve educational opportunities for all children in order to ensure their success in an increasingly high-tech society, we have to encourage them to take advantage of the most challenging classes and academic opportunities.

The present study has yielded two significant findings. First, the eight-group analysis proved a fruitful effort. While there were some male/female and race/ethnicity differences, important new patterns emerged when both gender and race/ethnicity were simultaneously taken into consideration. The schooling performances of African Americans, especially males, were least well-explained, a finding that was consistent with earlier literature (Hout & Morgan, 1975; Mickelson, 1990). The factors that were not common to all groups should ultimately be explicated and explored further.

The second significant finding was that the student educational expectations and achievement embodied in the status attainment model were best applied to Asian males and white students. Mickelson's paradox of expectation/achievement, then, holds true not only for African-American males, but also for Asian students and African-American females.

This study, then, raises a challenging question: What is the proper balance between generalization and specificity in assessing school performance? One answer to this question is that the academic experience of every person is unique. This is much too extreme a stance because it ignores the salient influences of common group phenomena. However, although life circumstances structure recognizable commonalities of experience within cultural groups, the authors believe that a "single-model" answer is no longer viable. The challenge for future research, then, is to answer the question posed at the beginning of this chapter: What balance can we strike between the differences and similarities in educational achievement among various minority groups? What standards shall we use to determine the analytic categories for quantitative analysis? Reliance on strict statistical procedures and on strict notions of parsimony have led us to a position that privileges a "single model" over a "multiple model." Consequently, for a long time, differences among populations that may be very important for educational policy have been ignored or minimized. Though there are no clear answers to this dilemma, the present study strongly suggests that answers that would have been given only a few years ago are less satisfactory in the face of new challenges from the forces of diversity.

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Appendix

Note: Scales are constructed so that high numbers indicate acceptance of whatever the scale is measuring; "0" indicates rejection of whatever the scale is measuring.

Dependent Variables:

- *Educational Expectations in 10th Grade*
- *R's Educational Aspirations Measured in Years* (Range: 11 - 20)
- *Mathematics Test Scores in 10th grade*

Independent Variables:

- *Belong in HS* (Do feel you belong in HS?)
  - Why R goes to school scale (Range: 0 - 6; Alpha: .76)
  - Locus of control (Range: -2.79 - 1.460)
- *Socioeconomic Status*
  - Socioeconomic status scale (Range: -2.790 - 2.954)
- *Nonacademic Peer Pressure*
  - Friends support nonacademic activities; peer social integration (Range: 0 - 15 [strong negative support]; Alpha: .55)
- *Want Good Life*
- *Well-Rounded Success Indicator, Future Looks Good, Number of Items of Good Life R Wants* (Range: 12 - 36; Alpha: .84)
- *High School Programs* (0 = no, 1 = yes)
  - In academic HS program (36.2% yes)
  - In vocational HS program (10.2% yes)
  - In general HS program (53.6% yes)
- *Number of Hours Homework per Week*
  - Number of homework done in and out of school per week (Range: 0 - 34)
- *Mom Expects College* (0 = no, 1 = yes; 87.2% yes)
- *Number of Others Expect College*
- *Number of Nonparental Adults Encouraging R to Go to College* (Range: 0 - 7)

- *Teachers Are Okay*
    - Number of ways R thinks teachers are okay (Range: 0 - 6; Alpha: .70)

- *Parental Involvement*
    - Number of ways parents are involved in school; parent attends meetings, speaks to teacher, goes school events, volunteers at school (Range: 0 - 10; Alpha: .69)

- *In Public School* (0 = no, 1 = yes; 86.1% yes)

Thirteen:

THE MACROECOLOGY OF EDUCATIONAL OUTCOMES

David W. Bartelt

INTRODUCTION

After three decades of debate over the causes of educational deficits in our urban schools, beginning with Conant's seminal work (1961), both Katznelson and Weir (1985) and Kantor and Brenzel (1993) have forced us to confront the possibility that the changing makeup of our cities, not necessarily the schools themselves, which accounts for much of the failure of our educational system. In arguments that correspond with the debates over the origins, characteristics, and perpetuating mechanisms of the underclass, these works focus on the rapid changes in urban communities that form the local context of schools. The movement of resources, jobs, and people from central city to suburb has created a much more hostile environment for communities and their institutions within the inner city. This is particularly striking when we examine the impact of these forces on the educational success of children and young adults in these areas.[1]

The task that confronts us, as researchers and as prescriptors of public policy, is to examine how the forces of change in urban economic, residential, and fiscal conditions create a set of constraints upon the effective operation of schools. This task has several dimensions, the first of which is to establish that there is an empirical relationship between these macrosocial forces (specifically, those affecting the ways in which cities grow and decline relative to one another) and educational accomplishment. A further implication of this approach is that the educational system--including its students--is part of a larger urban ecology than is usually considered, namely an interurban relationship among metropolitan areas. This "macroecology" of urban relationships treats the educational system as a part of the institutional infrastructure of urban areas that helps some and hinders others in the pursuit of a comparative advantage in the competition among urban areas for economic resources, population, and a tax base.[2]

This chapter contains both a conceptual and an empirical discussion of the macroecology of inner-city schools, particularly the ways in which schools are constrained, in terms of resources, by their urban context and must contend with a set of forces impinging upon the educational process. Educational policy is often ill equipped to deal with these constraints.

Toward an Ecology of Education

At the heart of analyses focusing on city change rather than educational failure is a paradigmatic shift in focus, from schools to urban processes. Schools do not disappear from the analytical frame; rather, the network of institutions and processes that affect the schools becomes the focus of concern. This analysis ks to weave a set of connecting threads between research on inner-city schools and research on the dramatic shifts in the nature of urban life at a national and metropolitan level.

The main organizational feature of American education is that it is simultaneously embedded in national and multinational institutions and very localized in its point of delivery. American education is rooted in the concept of the community school; American educational policy is rooted in the problem of adapting to economic, political, and social agendas that transcend local schools; and American schools must contend with rapidly changing communities in which their student composition, educational mission, and resource base are largely determined by factors external to any individual school or school system.

Educational critics and policymakers have long recognized this essential dilemma, particularly with respect to urban schools (Havighurst, 1966; Hummel & Nagle, 1973; Schrag, 1967). The response has essentially been a prescriptive one, in which various alternative strategies are suggested, such as magnet schools, bussing, and voucher programs (Ravitch, 1983). What is missing is an analytical attempt to systematize the nature of the various contexts within which educational policy and practice are carried out.

Schools are embedded in a network of social processes. They do not start with the same set of resources, with equivalently motivated students, with randomly assigned students or without reputations for either quality or failure, any more than any other social institution in American society. The ecological model suggests that it is possible to distinguish the salient characteristics of the social arrangements within which schools are embedded as a means of better understanding the outcomes of the educational process. By extension, it also suggests that we can identify the support services which may need to be integrated into and coordinated with the educational process in order to improve educational outcomes, particularly in inner-city schools.

The central concept of this chapter is that of "nested" ecologies of education. As we describe macroecologies we find that, much like the Russian dolls with which children play, we uncover a second or third ecological system at work. A classroom exists within a school and its ecology of teachers, classrooms, physical structures, and the like. Schools exist within a network of competing, complementary, and other relationships--and in cities, within a system of distribution of resources and constraints. Schools are only one part of the institutional ecology of cities, and are affected by the neighborhood ecology of the city. Finally, cities are linked to each other in a complex ecology in which population, opportunities, and fiscal capacities are distributed differentially within the network. In other words, any educational reform effort occurs within the limits of the ecological niche that a school district and its students occupy in the national urban network.

Cities, which form the largest embedding context, are forms of social organization that include both a network of communities and an institutional matrix of private and public organizations addressing various political, economic, and social activities. This chapter examines the extent to which the interactions of a group of cities affect their opportunity structure (for example, the presence or absence of jobs, their population and job development "trajectories") and educational outcomes.

"Inner cities" and "inner-city schools" denote a geographic referent that includes processes of racial and class stratification but that also taps into the effects of concentration and isolation by race and class (Kasarda, 1989; Wilson, 1987). Much of the literature on the educational deficits of urban schooling implicitly or explicitly ties educational outcomes to one of two major variables that can (in principle) be linked to these stratifying forces. Distributional problems/inequities in direct educational financing or other finance-related resources (for example, computers, books, audiovisuals, support staff, and so forth) shape one literature (Hummel & Nagle, 1973; Verstegen & Ward, 1991). "Family" variables such as income level and "penalties" associated with poverty, shape the second (Crane, 1991; Kennedy, Jung, & Orland, 1986; Mayer, 1991). In both instances, particularly the latter, recent analyses of the "underclass" have suggested that racial isolation and the concentrated effects of poverty combine to negatively affect the likelihood of educational success and the ability to use education as a means of social or geographic mobility.

This chapter systematically examines the consequences of economic transition, national migration, and urban decentralization on a major indicator of educational success--the proportion of students aged 16-19 (the typical age bracket for achieving a diploma) who are either not in school or have not achieved a degree. This examination should reveal the degree to which schools in urban areas experiencing the most significant negative changes are coping with a population which, due to these large-scale economic and demographic forces, is likely to experience not only educational torpor but a cluster of social problems. These problems interfere both with students educational prospects and with the fiscal capacity of local governments to meet the demands exerted on it by these problems and the educational endeavor.

Using a data set from 53 cities, I suggest the following findings, relevant to the discussion of educational outcomes: (a) there is a suggestive relationship between city development trajectories and patterns of educational funding; (b) there is a distinct pattern to the levels of racial segregation found in cities, strongly linked to the economic history of those cities; and (c) a strong ecological relationship exists between the economic development of cities, opportunity structures, funding levels, and the degree to which cities have a dropout problem. Finally, if we accept the findings of this model, the correlates of the position of cities in the system of cities suggest that educational outcomes are highly correlated with other products of the system, such as economic opportunities and the relative presence of single-parent households.

Taken together, these findings suggest that the macroecological framework yields significant insights into the "externalities" affecting educational activities in the urban environment. This provides a sound basis for the development of an alternative modality for the discussion of educational policy, based on concepts such as "resistance" or "degree of difficulty."

As Raffel, Boyd, Briggs, Eubanks, and Fernandez (1992) have stated, any approach to educational policy in our cities must be comprehensive in nature, addressing the public health, nutrition, and other supportive service needs of the community. What we expect to demonstrate is the essential basis for the current educational dilemma facing inner-city schools--that cities rooted most deeply in older economic bases face the most serious educational deficiencies, have a significant set of related problems which intersect those being addressed by the schools, and have a counteracting set of negative fiscal factors.

This argument asserts the interdependence of inner-city educational systems with their urban contexts, particularly the ways in which macrourban changes affect both the context and the outcomes of schools. The analysis will move from changes in the national system of cities to the ways in which these changes affect the educational process. We then consider the implications of this argument for the social context of inner-city education--namely, that the same forces that give rise to educational difficulties yield a series of related community characteristics that affect the educational process. The chapter concludes with a discussion of policy alternatives aimed at the complex of issues surrounding educational achievement and the place of the school within the new urban setting. We aim to demonstrate the further embeddedness of urban systems in a wider, national system of urban processes--cities as systems in systems of cities, to use Berry's (1972) approach.

If this larger context proves useful, it will suggest that at least some of the educational policies which we aim to alter must be addressed at the nonlocal level if true educational progress is to be made. This will require stepping away from the traditional political perspectives of left and right and considering the issues confronting inner-city schools from a more systemic perspective. As Kantor and Brenzel (1993) have argued,

> neither liberal nor conservative analyses of the contemporary crisis in urban education explain adequately why the educational initiatives begun in the 1960s have failed so frequently to live up to the expectations of their proponents or why conditions in urban schools have not substantially improved over the past two decades. (p. 368)

The Macroecology of Postwar American Cities

This argument rests on three intersecting macrosocial forces which have dominated American urban life since World War II. The explosive growth of suburbs, combined with the persistent flight of manufacturing from relatively high-waged regions of the country to more hospitable environs, has created a new, decentralized form of urban life. This spatially segregates, by poverty and race, a smaller, less economically viable, and more African-American city from its more prosperous suburbs (Wilson, 1987). In addition, the significant growth of a "postindustrial" economy, dominated by the service sector, has impacted on the economic externalities of education, affecting both employment possibilities (Bluestone & Harrison, 1982; Harrison & Bluestone, 1988; Kasarda, 1989) and the fiscal health of cities (Noyelle & Stanback, 1983; O'Connor, 1973; Rusk, 1993).

Thus, inner-city schools are increasingly the schools of remnant populations and communities trapped by their economic irrelevance or their links to diminished labor markets. Further, they are increasingly dependent on an overloaded and endangered fiscal base. But another characteristic of this period is the unevenness of these changes. Not all cities experience them equally, and not all began with the same resources and constraints after World War II, either demographically, economically, or fiscally. Just as schools differ in their community context and student composition (Yancey & Saporito, this volume), they vary by city.

Two major processes have taken place which impact tremendously on the opportunity structure of the American city. First, and most noticeably, the city of the late 20th century is decentralized. Whether one calls it sprawl, "edge city," megalopolis, or "the malling of America," the Dickensian world of the 19th century, with its overcrowding, narrow streets, and noisy city tenements is largely a thing of the past.

Second, the nature of the economic activity which undergirds urban life has dramatically changed. The urban explosion of the late 19th and early 20th century was fueled by factories and railroads, and by immigrants looking for work. Mass education in that era taught work discipline, common language, and rudimentary mathematical skills (Katz, 1971). In the late 20th century the American economy has changed to a service sector economy (Noyelle & Stanback, 1983) and expectations have grown regarding the nature of job skills within at least the upper-level service occupations (e.g, medicine, legal, management, and so forth).[3]

In terms of inner-city education, the implication of these events are that a city's capacity to address changing educational needs and the kinds of extraeducational influences upon schools are contingent on the city's success in dealing with these changes in urban social structure. A major focus of our analysis is thus the insistence that we identify different forms of urban development and locate the educational system within them. The issue is not only that schools are likely to be different from one city to another along distinct trajectories responsive to the forces of decentralization and economic change. For instance, contrasts between Sun Belt and Rust Belt cities have been offered as prima facie evidence that a new urban perspective, both analysis and policy oriented, was required (Perry & Watkins, 1978). When benign neglect emerged as the actual policy during the 1980s, this was in many ways a de facto acknowledgement of the declining importance of "urban" areas in public policy discourse--particularly at the national level.

This decline was unfortunate, particularly for discussions of inner-city schools, because it masked real losses in jobs while allowing the traditional conception of the school as the major intervening force in people's lives--and hence a major mechanism for escaping poverty and the effects of racial discrimination--to remain unquestioned (but Jencks, 1972; Mosteller & Moynihan, 1972).[4] As urban problems worsened during the 1970s and 1980s, benign neglect combined with persistent urban fiscal problems (and the increased devolution of social policies from Federal to local and individual responsibility) to remove direct national intervention into urban affairs as a viable policy option. At the same time, the traditional conception of the school as a lever for community and personal improvement focused significant pressure on the urban educational system as one of the few remaining social and bureaucratic structures available to address the increasing panoply of urban ills.

Indeed, as cities began to experience the pangs of economic dislocations, particularly in jobs, a frequently heard critique of traditional inner-city locations for businesses and jobs was the inadequate preparation being offered by the schools. This may have been partly true, but flight from unionization, tax incentives in other locations, and the inadequacy of inner-city economic infrastructures and venture capital were equally important factors (Bluestone & Harrison, 1982; Noyelle & Stanback, 1983). The attention paid to educational deficits and to the graduation of ill-prepared students masked a more invidious relationship--namely, the decline in jobs available even to the graduates of the educational system. Particularly in the case of the public school system, the inducement for remaining in the system, for pursuing college-bound tracks as well as vocational training, and for obtaining a diploma, has been an explicitly economic payoff such as a job or a form of economic mobility.

The dual change in the macrourban ecology--the shifts in capital, people, jobs, and development from Frost Belt to Sun Belt, and from central city to suburbs--has thus disrupted the entire context within which the American public school emerged. As Massey and Denton (1993) argue, this change not only undercut urban communities, but increased the effects of racial and income segregation across many facets of urban life, including education.

Further, the forces which were impacting cities and changing their internal community dynamics--their ecologies--were beyond the control of either school systems or most local institutions, including municipal governments. Policy debates, both urban and educational, lacked the analytical framework to handle changes both in the internal dynamics of cities and the distribution of resources and people across metropolitan areas.

The standard works on metropolitan development in the United States have typically posited a persistent, largely stable hierarchy of economic and political importance among cities (Berry, 1972; Duncan, Scott, Lieberson, Duncan, & Winsborough, 1960; Duncan & Lieberson, 1970). Few posited rapid changes within the interurban hierarchy that emerged from these dramatic economic and demographic shifts, nor could they have predicted the dramatic new waves of immigration that have fueled the cheap labor markets of the new industrial development of the South and West. And none effectively predicted the transformation in urban thought and urban reality which yielded an increasingly abandoned inner city replacing the vital core of the larger metropolis (Sternlieb & Hughes, 1981).

The urban context for education has changed dramatically, then, as cities lose population and jobs, some to the suburbs, but most to other regions or countries. This shift in both the nature and location of work has created a significant set of educational problems and constraints in its wake--ones which are best n in an ecological context. In its most extreme form, Wilson (1987) has identified this trend as the development of the underclass (also see Kasarda, 1989).

The System of Cities and its Educational Indicators

The argument advanced thus far can be condensed as follows: (a) schools are organizations which are particularly sensitive to their urban context; (b) students reflect the economic and social dynamics and conflicts of their neighborhood and their city; (c) the schools themselves are driven by both the educational process and the fiscal climate within which they must operate; and (d) effective schools and effective schooling depend on a series of mutually supporting community, family, and economic institutions. To the extent that cities are decentralizing, their economic base declining, their fiscal climate becoming more distressed, and their population exiting, schools face an increasingly difficult task.

This model must demonstrate that real differences exist across cities, and that the same factors which categorize cities point to differences in educational practices and outcomes. In other words, educational outcomes are embedded in a set of institutional and community relationships, such that the forces impacting cities and communities are reflected in the relative success or failure of their schools.

In order to empirically examine the ways in which the systemic, macroecological character of inner city manifests itself, educational variables should be set in the context of the factors driving the national system of cities. Such an examination should include a recognition of changes in both the types and location of jobs in metropolitan areas, as well as corresponding shifts in population, including size, racial concentration, and immigration. Both the financial support of public schools and the ability of schools to retain students at least until they earn their high school diplomas are characteristics of cities hypothesized to be sensitive to students' developmental path.

The data set which has been developed to examine this hypothesis is a synthesis of several economic, population, and government census data sets, aggregated to the level of central cities and their metropolitan areas.[5] The database is historical in nature, covering economic census materials from 1929 through 1987 and population data from 1930 through 1990. Materials specific to the operations of school districts in 1986-87 were obtained from the 1987 Census of Governments. Table 13.1 briefly summarizes the major variables used in this analysis.

The data set was collected for a sample of 59 metropolitan areas, based on the sample first developed by the American Housing Survey. This is a purposive sample, stratified by size to ensure that all sizes of central cities are contained within its MSA sample frame (Abt Associates, 1984). Honolulu has been eliminated from the study, largely because of inconsistent data from the earlier time periods, leaving a 58-city data set.

In earlier work (Bartelt, 1985, 1990) the basic variable, which is very effective in characterizing cities and their developmental paths since 1929, is the manufacturing ratio--the proportion of jobs held within the manufacturing sector compared to those of the wholesale, retail, service, and manufacturing sectors combined. This simple index, when examined over time, indicates the degree to which a city is a major manufacturing center, as well as the shifts it makes toward a more service oriented economy. In general, the literature on urban change suggests that urban fiscal problems are associated with persistent attachment to a manufacturing base, as are problems associated with the thinning out of cities--abandoned housing, pockets of isolated poverty (for example, underclass communities), and persistent high levels, sometimes increasing, of racial segregation.

Table 13.1
Major Variables in the Macroecology of Educational Outcomes

Variables	Source
Manufacturing ratios, 1930, 1990 (Manufacturing jobs/total jobs)	Economic Census, 1929, 1987
Population 1930, 1990 (Total, African American)	Decennial Census, 1930, 1990
School revenues, expenditures, 1990	Census of Government, 1987
School enrollment, 1990	Census of Government, 1987
Linguistic isolation	Decennial Census, 1990

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Table 13.2 lists the 58 central cities, cross-classified by the different levels of their manufacturing ratios in 1929 and in 1987. Dividing the levels into three categories allows at least a simple understanding of the shifts that various cities have experienced. Even examining the marginal distributions suggests that the basic shift from a manufacturing to a nonmanufacturing economy has been substantial. Manufacturing ratios in 1990 have a much lower level across the categories, with the point of division between high and moderate levels in 1990[6] falling below the corresponding point for the lowest category in 1930. Put differently, a city in 1990 can be regarded as heavily manufacturing if more than 290 of every 1000 jobs is in that sector, whereas in 1930, the corresponding level would be 559 of every 1000.

As we examine the categories along the diagonal from upper left (low MR at both times) to lower right (high MR at both times) in this classification, it is important to note that, in a relative sense, there is a significant amount of persistence in the level of manufacturing between 1930 and 1990. Cities which traditionally had either mixed local economies (for example, Denver and San Francisco) or highly specialized nonmanufacturing economies (for example, Las Vegas, Miami, Orlando, Washington, D.C.) had low manufacturing ratios in 1929, and maintained that position in 1990. Major manufacturing cities in 1929, such as Allentown, Buffalo, Cleveland, Newark, and Paterson, remain, to this day, more heavily manufacturing than their sister cities. Although there are no examples of cities which had a high manufacturing ratio in 1930 who developed a low one in 1990, cities contained in the lower left cells show a stronger movement away from manufacturing jobs over time, while those contained in the cells to the right and above the diagonal are cities which have become relatively more important as manufacturing centers (even though their actual level of these jobs may have been fairly modest by 1929 standards.

Table 13.2
Comparison of City Manufacturing Ratios, 1993 and 1990 (58 Cities)

	1990 Low MR	<.215	1990 Med. MR	≥.215 - ≤.290	1990 High MR	>.290
1930 Low MR <.365	Denver Las Vegas* Miami* Orlando* Raleigh*	San Antonio San Francisco Spokane Washington	Col. Springs Dallas Kansas City Okla. City	Phoenix Salt Lake City San Diego	Anaheim Ft. Worth Wichita	
1930 Med. MR ≥.365 - ≤.559	Albany Atlanta Boston Hartford Houston	Madison New Orleans Omaha San Bernardino Seattle	Birmingham Columbus Memphis Minneapolis	New York Pittsburgh Portland Sacramento	Los Angeles St. Louis	
1930 High MR >.559			Baltimore Philadelphia Springfield Tacoma		Allentown Buffalo Chicago Cincinnati Cleveland Detroit Grand Rapids Indianapolis	Louisville* Milwaukee Newark Newport News Paterson Providence Rochester

* Excluded from further analysis

Table 13.3
Change in Median Levels of Economic and Demographic Indicators, 1930 to 1990

		1990 Low MR (<.215)		*1990 Med. MR (≥.215≤.290)*		*1990 High MR (>.290)*	
1930 MR Level	Variables	Actual Change	Percent Change	Actual Change	Percent Change	Actual Change	Percent Change
1930 Low MR <.365	Manuf. ratio	-.146	-47.5	-.0007	-2.6	.142	46.8
	Jobs per capita	.227	215.8	.170	168.2	.285	214.5
	Population ('000s)	171.0	223.0	259.7	241.3	255.4	174.6
	Afr. American ('000s)	52.8	483.7	56.4	666.6	14.4	343.2
	Percent Afr. American	8.6		7.5		2.3	
	City/sub. ratio	-.715	-71.0	-.632	-45.4	.042	11.2
1930 Med. MR ≥.365 - ≤.559	Manuf. ratio	-.217	-52.3	-.237	-49.0	-.095	-20.5
	Jobs per capita	.166	111.7	.145	86.2	.173	87.5
	Population ('000s)	122.9	43.5	205.3	25.2	910.5	64.9
	Afr. American ('000s)	48.2	678.9	62.3	438.6	217.8	627.6
	Percent Afr. American	16.7		15.4		23.5	
	City/sub. ratio	-.617	-61.8	.499	-52.6	-.803	-61.9
1930 High MR >.559	Manuf. ratio			-.322	-53.0	-.240	-36.2
	Jobs per capita			.066	34.7	.106	47.1
	Population ('000s)			-31.0	-2.0	-87.0	-17.1
	Afr. American ('000s)			160.3	531.9	87.0	365.0
	Percent Afr. American			22.8		28.3	
	City/sub. ratio			-1.294	-73.2	-.928	-70.3

By itself, this cross-classification offers little but basic information about which cities have changed most in dealing with the fundamental deindustrialization process. Table 13.3 contains a summary of some of the basic variables discussed earlier as they reflect changes in both the manufacturing ratio and associated indicators of economic opportunity, decentralization, and the uneven migration of African Americans across the city system. The manufacturing ratio increased on average (median) in only one category of city, those cities low in manufacturing in 1930 but high in 1990. Both Fort Worth and Wichita emerged as major urban areas after serving largely as agricultural rail heads prior to 1930, while Anaheim's manufacturing increase can be traced to the very specific intervention of the aerospace industry, beginning during World War II. It is also interesting to note that this set of cities experienced the only growth in the proportion of residents in the metropolitan area living within the central city.

In all other cases, the basic pattern of decentralization and migration suggests itself. Older manufacturing centers have lower population increases and, in the most heavily industrial cities, clear losses. This is also generally reflected in the city-to-suburb ratio of population, where higher manufacturing ratios in 1930 are reflected in a higher level of suburbanization (higher negative values). The only exception to this rule is in the case of cities which have persistently been in the low range of the manufacturing ratio. The older and more developed cities, such as Washington and San Francisco, which have experienced significant regional growth, provide some clue to a countervailing process to simple manufacturing decline. In other words, there are reasons for growth apart from simply a shifting economic base, such as the development of southern and western metropolitan areas as a reflection of the Sun Belt shift, reflected in most of the cities in this cell. Washington, on the other hand, provides evidence of a singular form of metropolitan development, tied to the government, regulatory, and supportive office structures.[7]

Of particular interest in this table are the striking data on racial change in cities. If we were to examine only the data on the changing numbers of African Americans in cities, by far the largest proportional increases occur in cities having lower manufacturing ratios in 1930. Upon closer examination, however, this is clearly an increase that depends upon the relatively low numbers of African Americans present in 1930; the largest growth in percent African American occurs in the cities with the highest manufacturing ratios in 1930, and those which became more highly manufacturing in 1990 than in 1930 (Los Angeles and St. Louis).

These findings are consistent with recent research on the sources of 20th-century African-American migration to urban industrial centers, and the relative immobility of both low-income and African-American households in recent decades. Frey (1978) points to the highly selective nature of African-American migration throughout the 20th century, while Long (1988) points out that recent migration streams indicate a persistent direct relationship between educational levels and migration rates. Thus, migration is no longer the option for the unskilled laborer in search of a job, but is increasingly a pattern associated with increased educational attainment. Further, Farley and Allen (1987) state that geographic mobility is increasingly associated with intact families and a significant household resource base.

Put directly, African Americans migrated to older centers of manufacturing industry virtually at the same time that whites were beginning to move to the emerging economic centers of the Sun Belt (Long, 1988). As the character of migration changed, lower-income and less-educated households--particularly, but not exclusively, African-American households--remain behind. In a larger context, as population and capital relocated after World War II, it tended to leave cities where African Americans had resettled during the prewar and immediate postwar periods.

The summary data presented here suggest that the shift from a manufacturing to a service-sector economy, which underlay much of the geographic shift in urban resources, occurred differentially across the system of cities. While there is some degree of continuity in the relative dependence of cities on the manufacturing sector, there is also convincing evidence that this shift to a nonmanufacturing economy has been facilitated in some cities and retarded in others. In addition, patterns of racial concentration and suburbanization may well be linked to this process, although not in a simple monotonic relationship. Indeed, the data on jobs per capita, a crude indicator of the changing opportunity structure, suggest that older manufacturing centers have changed less in this respect than other cities. Broadly speaking, the lower the dependence on manufacturing in 1930, the better the employment picture for cities today. Given a relative decline in job opportunities, outmigration and suburbanization are viable options for those able to make the move.

Implications for Education

While the economic base of cities has certainly changed, the accompanying decentralization of cities appears to have had the strongest direct relationship with inner-city educational issues (Katznelson & Weir, 1985; Kantor & Brenzel, 1993). In particular, the spatial deconcentration of population in urban areas interacts with economic dislocation to decrease the access of inner-city households to jobs and wages (Adams et al., 1991; Kasarda, 1989; Noyelle, 1987). Suburbanization of people in cities is as much an economic as a social response to a changed urban economic order.

This suburbanization process can be examined across our sample of cities. If we use a simple measure of decentralization, the proportion of a metropolitan area's residents living within the central city, we can directly examine some of the relationships between decentralization and education.

Table 13.4 contains a three-by-three breakdown of cities by their level of central-city metropolitan population. The lower the central city's proportion of metropolitan population is, the greater the degree of suburbanization. Again, the marginal values indicate that the degree of central-city dominance expressed in this measure was uniformly higher in 1930 than in the contemporary metropolis. The cutoff point for cities having a relatively high degree of suburbanization in 1930 is more than 30% higher, on average, than for the same proportion of cities (1/3) today.

In Table 13.5, we use the same breakdown to isolate data on school expenditures (revenue per capita and educational expenses per student), the relative size of the school population, and the proportion of school-age children (16-19) who are not enrolled in school and do not have a high school diploma. The data show, as might be expected from the arguments of Kantor and Brenzel (1993, that there is a distinct relationship between decentralization and the fiscal climate of schools. If we look at the revenue base for schools--the revenue load in cities that are highly decentralized in 1990--the average amount of revenue generated across a city's population is higher than in less decentralized cities. In the most decentralized cities in 1990, between $681 and $739 per person (averaging $697/person) is generated for schools, whereas in the more centralized urban areas the load ranges between $407 and $579 (averaging $568/person).[8] To some extent, this is linked to the early presence of some highly decentralized cities, and their persistence over time. This is best in an inspection of the diagonal cells from those persistently decentralized (the upper left cell) to those in which the city maintains a strong proportion of the metropolitan population.

In the case of instructional expenditures for students, a similar pattern exists. City schools spend between $2,743 and $2,828 per student (overall average of $2,775 per student) in the categories indicating highly decentralized areas, whereas they spend less per student, from $1,953 to $2,269 (averaging $2,200/student), in metropolitan areas that are heavily decentralized in 1990. Again, while there is some effect which might be tied to the persistence of decentralization, this trend is most strikingly evident in cities which are highly decentralized in both time periods.

The pupil-to-population ratio was essentially included as a control variable. It would have been interesting if either the revenue or the expenditure amounts consistently varied by the relative level of students in these cities. That is, if cities that were highly decentralized also had a consistently lower number of students relative to the general population, we might expect that some political factor might be at work, in which scarce resources were allocated to noneducational uses. There is, however, no such trend present in the student/population ratio. Instead, there is a counterintuitive finding which suggests a plausible explanation for much of the political conflict over educational policy. The data we have examined demonstrate that the more decentralized a city is, the higher the level of instructional expenditure, and the heavier the economic burden on the taxpayer.

The literature on fiscal health of cities suggests that decentralization is a significant correlate, and possibly causally linked, with fiscal distress (Rusk, 1993). Essentially, these data suggest that schooling in decentralized cities is more expensive, and brings a correspondingly heavier burden on the taxpayer. This strongly suggests that cities experiencing the greatest population losses and, by extension, a more diluted tax base, are simultaneously being asked to carry an increasingly costly educational system.

It is beyond the scope of this analysis to examine the components of educational expenditures (for example, wages, special and compensatory educational costs, materials, and so forth). By focusing our attention on instructional expenditures, we essentially controlled for variations in bureaucratic overhead as much as possible. Further research should address this issue in some detail before reforms of educational expenditures are suggested. Clearly, calls for reduced educational funding--or at least the demonstration of positive educational effects as a condition of increased expenditures--will fall on attentive ears in cities with highly decentralized metropolitan areas. Rusk (1993) has pointed to these cities as exactly those with higher neighborhood and educational segregation levels, and suggests that these factors interfere with educational effectiveness as well.

This chapter primarily focuses on the last variable in the table, the estimate of a city's dropout rate. The ratio is expressed in a decimal format, which can be reinterpreted in one of two ways. In cities which were highly decentralized in both 1930 and 1990, 134 of every 1,000 young adults (16-19 years old), were neither in school nor had a high school diploma. Alternatively, 13.4% of the young adult population could be considered to have dropped out.[9] In cities with the lowest proportion of central city population, the average ratio varies between .134 and .166. Strikingly, there is no evidence of a simple linear relationship between decentralization of cities and the number of dropouts in 1990.

Two possible explanations come to mind. First, evidence of simple relationships is usually hard to find in social science research. Dropout rates may be better explained by a more complex model than decentralizing metropolitan dynamics. (In fact, the analysis turns to just such an approach in the following section.) But it may also be fruitful to think somewhat further about the nature of the dropout process.

Table 13.4
City Population as a Proportion of Metropolitan Population, 1930 and 1990

	1990 - Low <.239	1990 - Medium ≥.239 - ≤.386	1990 - High >.386
1930 Low <.500	Albany Allentown Anaheim Atlanta Boston Minneapolis Newark Pittsburgh Providence San Bernardino San Francisco	Birmingham Paterson Sacramento Springfield	Phoenix
1930 - Med. ≥ .500 ≤.648	Cincinnati Hartford Rochester St. Louis Salt Lake City	Buffalo Fort Worth Grand Rapids Kansas City Philadelphia	Col. Springs Columbus Dallas Indianapolis Los Angeles Madison Memphis Oklahoma City Wichita
1930 - High >.648	Denver Washington	Baltimore Chicago Cleveland Detroit Portland Seattle Tacoma	Houston Milwaukee New Orleans New York Omaha San Antonio San Diego Spokane

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Table 13.5
Educational Indicators by City/Suburban Population Ratio, 1930 and 1990

	1990-Low <.239		1990-Medium >.239-<.386		1990-High >.386	
1930-Low	Mean	Median	Mean	Median	Mean	Median
Revenue/population	.681	.579	.592	.605	.407	.407
Expenses/pupil	2.743	2.455	2.283	2.334	1.953	1.953
Pupil/population	.130	.119	.150	.152	.110	.110
Dropout estimate	.134	.120	.153	.145	.185	.185
1930-Medium						
Revenue/population	.739	.653	.614	.617	.579	.529
Expenses/population	2.828	2.682	2.178	2.232	2.269	2.062
Pupil/population	.146	.143	.144	.135	.144	.142
Dropout/estimate	.166	.160	.147	.149	.140	.138
1930-High						
Revenue/population	.683	.683	.671	.641	.577	.549
Expenses/pupil	2.817	2.817	2.285	2.463	2.153	1.936
Pupil/population	.135	.135	.145	.151	.148	.134
Dropout estimate	.150	.150	.161	.171	.127	.132

Discussion of school dropout is usually considered within the framework of schools failing students (Natriello, 1987). However, Fine and Zane (1989), in their study of young women dropouts, find that students are reacting both against school and against pressures from their communities to become early adults. Pallas (1980) found in his national study of dropout rates that students in many communities were both turned off by school and opting toward another set of choices, typically linked to economic opportunities. This jibes with anecdotal evidence collected in field studies in Philadelphia's Latino community, in which education past ninth grade is often regarded as a luxury because of the need to have another breadwinner in the family.

The practical consequence of this discussion is that dropout rates may be high in cities experiencing economic and educational deprivation, but also high where economic opportunities are sufficiently present to lure students from schools into the labor force.

In any case, the next step in the analysis allows us to empirically sort out some of these relationships. Using the dropout rate as a dependent variable, we tried to discern the set of predictive factors which would help explain the variation of these rates across the 53 cities. In trying to capture the possibility of increased opportunities affecting dropouts, we composed a variable which indicated the metropolitan area's growth rate from 1930 through 1990--that is, the proportional growth of metropolitan areas since 1930. We also added a variable, new to the 1990 Census, called linguistic isolation, which indicates the proportion of households in which English is not the primary language and represents a proxy for the effects of immigration on the educational process.

In early attempts to predict dropout rates, decentralization had a negligible and nonsignificant relationship to the number of dropouts, and thus does not appear in the final equation analysis reported in Table 13.6. This finding is not unexpected, given our earlier discussion. What is striking is the way in which city system factors interact with fiscal forces to predict school dropout rates. The R^2 of .54 represents a significant level of explained variance. Further, the beta weights indicate a strong pattern of support for a systemic, or macroecological, interpretation of dropout rates.

Table 13.6
Regression Analysis of Dropout Rates

Variable	Beta
Manufacturing ratio	.279*
Percent African American	.341*
Revenue/population	.297*
Per-pupil expense	-.368*
Linguistic isolation	.292*
Metropolitan growth rate	.274*
R^2	.54

*Sig. at .01

As the analysis indicates, city dropout rates appear to be a function of both opportunities and constraints. Dropout rates tend to be higher in cities which remain highly manufacturing in their makeup, and in which the percentage of African-American population is high, holding the other factors constant. These are cities in which the revenue load is high, but the instructional expense is somewhat lower, and where the instructional needs of students tend to be higher due to linguistic isolation. Interestingly, the dropout rate is also affected by the growth rate, indicating that there are conditions in which potential increased opportunities are associated with dropping out.[10]

DISCUSSION AND IMPLICATIONS

The vast bulk of the educational literature suggests that differences in race, class, segregation, and family resources (both social and economic) are reflected in differential educational attainment, and that they codetermine, with educational credentials, the economic attainment of students. Education, apart from its internal agenda of transmitting knowledge and skills, is recognized as the credentialing arm of the labor market (Burtless, 1990; Collins, 1979; Katz, 1971).

From a macroecological perspective, education systems link households and the labor market. This analysis argues that the performance of a city's schools reflects the operations of its political economy and specifically the relative strength of its opportunity structures. In this model, based on a dynamic system of cities, the evidence on school retention suggests that schools differentially succeed, depending on the city in question. It is less clear whether the schools control the extent to which they can succeed. Put bluntly, the argument in policy circles and in the general public is increasingly that inner-city schools are "failing." However, schools should be assessed within the context of the resource base and the opportunity structures which provide the context for their operation.

The relative success or failure of schools can never escape the social processes in which they are deeply enmeshed in day-to-day operations. These social processes create an educational task that schools are often not well equipped to handle, particularly in the instance of communities and people coping with rapidly emptying cities and declining economic and political opportunities.

Thus, the implications of this approach are far-reaching, as they indicate that educational policy can not proceed in an institutional and relational vacuum if it is to be effective. Instead, policymakers need to be aware of the intersection of the same macroeconomic forces that have created remnant communities, isolated from economic and social opportunities and increasingly the source of a despair that challenges even the most effective of schools (Kozol, 1991).

Striking evidence of this phenomenon can be generated from the 1990 Census of Population and Housing. Using dropout rates and manufacturing ratios as indicators of the educational and city system factors, a correlation matrix was generated from a set of indicators of poverty or competing fiscal demands. These variables were deliberately selected on the following basis: they reflect changes in urban income levels, unemployment, and labor force participation as direct measures of additional economic effects of deindustrialization and decentralization. They also include other claims on local fiscal climates, such as in the welfare, housing, mental health, crime, and homelessness levels. Taken collectively, they represent the potential correlates of economic dislocation. The results, presented in Table 13.7, are very striking.

One very clear force which intersects economically changing cities and the family background of students is the substantial correlation between female-headed households with children and both dropout levels and levels of manufacturing in 1930. Given that the correlation of percent African American with female-headed households in this sample is .752, a simple extension of the argument suggested in the regression analysis suggests itself. The entrapment of poor, predominantly African-American households occurred contemporaneously with the growth of single-parent households. In a city with limited economic opportunities, and where the evidence suggests that dual-income households are often a necessity to avoid poverty-level incomes (Adams et al., 1991; Burtless, 1990), the presence of single-parented households is economically problematic for the households involved--particularly when fiscal constraints reduce welfare payments. Modest but significant correlations are found between dropout rates and female-headed households, unemployment rates, percentages of people on welfare and in poverty, lower income levels, and the proportion of the population living in prisons, mental hospitals, and other nonmilitary, noneducational institutions, or in the homeless system (the percent institutionalized).

This evidence suggests that when cities experience the economic deprivation accompanying economic change and dislocation, the impact transcends any given institution, and involves a series of interrelated public problems. The picture drawn here is one in which unemployment and lowered workforce participation are both significantly associated with the degree of manufacturing dependence in cities. So are welfare rates, poverty rates, and lowered income levels.

In this context, it is impossible for us to limit the discussion of educational effectiveness to a within-classroom or within-school process. The limits placed on schools as organizations, the challenges facing them in the form of students bringing the correlates of economic desolation with them to the

Table 13.7
Correlation Matrix: Economic Base, Dropouts, and Poverty-Related Variables

	F Head H Hold	Not Lab. Force	Unemployed	Welfare	Percent Poverty	Median Income	Percent Boarded Up	Percent Inst'lized	Dropout	Manuf'ing, 1987
F Head H Hold										
Not Lab. Force	.628									
Unemployed	.816	.589								
Welfare	.863	.744	.815							
Percent Poverty	.888	.704	.842	.837						
Median Income	-.779	-.745	-.706	-.672	-.876					
Percent Boarded Up	.484	.511	.551	.436	.596	-.583				
Percent Institutionalized	.337	.212	.174	.282	.288	-.188	.148			
Dropout	.422	.069	.544	.355	.404	-.332	.382	.198		
Manufacturing, 1929	.591	.467	.442	.614	.448	-.471	.246	.020	.203	
Manufacturing, 1987	.298	.061	.317	.237	.156	-.212	.076	-.228	.357	.607

school, and the bleak futures facing these children as they contemplate restricted labor markets make a limited educational intervention foolish at best.

What form should interventions which adopt an ecological approach take? In the first instance, a major part of the problem facing us as educators is that our paradigms do not fit the dimensions of the problems. A useful first step is recognizing the ways in which our educational problems are inextricably tied to the collective set of problems facing inner cities in an era of decentralization and deindustrialization.

A new framework for grappling with the issues is not, by itself, enough. Consider the school as the focal point in a network of family, community, and economic relationships. A significant thread of redistribution emerges from some of the earlier results; that is, the increased costs associated with keeping students in schools through raising instructional expenditures only adds to the comparatively heavy burden felt by the taxpayers of these cities.

In addition, the concentration of African-American households in many of the most severely affected cities suggests that they will be asked to provide more in the way of resources and to gain less, in the way of educational benefits. Discussions must continue around issues of fiscal equity in schools, no matter how difficult recent court decisions and political struggles have made it.

If we limit our discussion to the simple matter of retention (a prerequisite for students gaining further content and other educational benefits) our earlier results, combined with the correlations just discussed, indicate a series of broad strategies need to accompany educationally specific interventions. In particular, business and job development programs need to be directly linked to educational programs. Similarly, greater educational opportunities, even to the level of guaranteed admissions, need to intersect.

At some point, we also need to recognize the intractability of the nexus between family structure and educational participation. While the relationships we explored here are largely ecological in nature, the essential logic of our arguments suggests that increased economic opportunities reduces the level of single-parent households, and, by extension, increases the likelihood that a more viable set of urban communities is generated.

The implications of such an approach are straightforward: educational and economic development efforts must be made to run in tandem. And until these efforts generate a turnaround in inner-city neighborhoods, educators should be prepared to discuss the ways in which social welfare, child care, increased instructional costs, housing, and supplementary educational programming need to reinforce each others' efforts both within the classroom and within the arenas of fiscal debate.

Endnotes

[1] This chapter would not have been possible without the able assistance of Sue Baker, who has been largely responsible for the successful development of the database used in the analysis. I would also like to express my appreciation to Leo Rigsby for careful editorial work and several helpful suggestions.

[2] While cities are discussed here solely within their United States context, whereas the forces which have affected them are discernible on a global level as well. Thus, U.S. cities no longer simply compete with each other, but with other trade, production, and financial services hubs across the world.

[3] It leaves aside, of course, the issue of lower-level service jobs. We do not yet have a clear signal of what is expected of orderlies, janitors, or street cleaners.

[4] The debate over "inequality," emotional as it was, masked an important shared assumption between Jencks (1972) and many of his critics, namely that there were factors more important than school structure, pedagogy, or other internal school forces that impacted upon student success within and beyond school years. In effect, Jencks and many of his supporters were pointing out that the sorting function of schools may well have been made redundant by the effects of spatial segregation and economic change.

[5] Metropolitan areas are determined by the Census Bureau as aggregations of counties, generally surrounding a large (50,000+) central city. In addition, most economic census data are reported on a county basis, especially in reports prior to 1960. The metropolitan areas used here are those defined by the Census Bureau effective in 1972.

[6] 1930 (representing the 1929 economic census) and 1990 (actually the 1987 economic census) will be used for these tables, to allow easy comparison to the population census dates. Also, five cities, indicated by asterisks, contain uniquely structured school districts, making it impossible to distinguish central-city school data from suburban data. They were withdrawn from later analyses of educational expenditures, dropout measures, and the like.

[7] Borchert (1982) has referred to this form of development as "command and control" center development. It is beyond the scope of this analysis to develop the full implications of this analysis.

[8] Not all funding necessarily comes from the city itself; in a few of the cities represented here, a statewide equalization formula is used.

[9] This may seem a low estimate to many persons whose focus is on schools and districts in which the dropout rates are much higher. But these are compiled by the educational system, using different criteria across systems to identify dropouts. Actually, three factors may account for differences in Census Bureau and local district estimates. First, the Census is essentially a self-reported survey, in which some degree of misrepresentation is possible. Second, public school systems report on only a limited set of all students in the 16- to 19-year-old category, so the Census indicator may reflect significant differentials in private school dropout rates. Third, some students move out of the school system and achieve a GED certificate after leaving school.

[10] A preliminary path analysis of this equation suggests that the effects of historical city system variables are mediated through several key factors, such as the degree of annexation, shifts in job

locations, and average wage levels, the effects of which are mediated through the revenue stream, the concentration of African Americans in certain urban areas, and the degree of linguistic isolation present in a city.

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Fourteen:

RACIAL AND ECONOMIC SEGREGATION AND EDUCATIONAL OUTCOMES: ONE TALE--TWO CITIES

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INTRODUCTION

For the last 30 years a wide range of social science research has debated the relative importance of racial and economic factors as determinants of family structure, crime, unemployment, and school achievement (Coleman et al., 1966; Jencks, 1972). Wilson (1987) has argued that the heated controversy following the Moynihan report resulted in many social scientists withdrawing from research examining the degree to which social and economic characteristics of the African-American population may be attributed to race culture, racial discrimination, and/or socioeconomic status (Jencks & Peterson, 1991). Very generally, public policy recommendations that have emerged from this research have been in one of two forms: the first have advocated specific remedial policies directed at the African-American community (for example, affirmative action, racial desegregation), while the second have been neutral with regard to race, arguing that there are generic conditions (for example, concentrations of urban poverty) affecting all racial and ethnic groups that must be addressed (Lawson 1992).

With this chapter, we join this debate, describing the results of research examining the racial and socioeconomic segregation of public schools in two very different cities: Philadelphia, Pennsylvania, and Houston, Texas. We have examined two issues: What factors explain racial and economic segregation in public schools? and What is the relative importance of these two forms of segregation for the academic achievement of students?

To answer the first question, one must understand four major factors: (1) metropolitan areas, cities, municipalities, and residential communities are segregated by race/ethnicity and social class (Bartelt, 1995; Kantor & Brenzel, 1993; Massey & Denton, 1993; Orfield, 1994); (2) most public schools draw from circumscribed and proximal geographic areas; (3) children from different groups attend public and private schools at different rates; and (4) school district policies (that is, magnet schooling and voluntary busing) designed to alleviate the effects of the first three factors attenuate racial segregation while unintentionally exacerbating economic segregation.

Understanding the relative influence of these two forms of segregation on learning is less straightforward. There are strong correlations between the percentage of students in schools who are minorities, the percentage of students who are from low-income families, and the average achievement level of schools. Because of the substantial correlations between the racial and the socioeconomic composition of schools, it is impossible to empirically isolate the effects of these two factors on achievement with cross-sectional data. It is possible to decompose the variance in achievement into that which is shared by racial and socioeconomic composition and that which may be attributed to each of these factors alone. Based on our analyses, it appears that the socioeconomic composition of schools is the more important determinant of academic success.

The present research augments a body of literature which suggests that "freedom of choice" desegregation programs--an out-growth of a 40-year-old mandate from the Brown decision--exacerbates the economic segregation of schools (Lee et. al., 1994; Moore & Davenport, 1990; Wells, 1993a, 1993b, 1993c; Witte, 1993). Economic segregation, in turn, has pernicious educational effects on poor students isolated with their peers in schools and classrooms (Crane, 1991; Fine, 1991; Kantor & Brenzel, 1993; Oakes, 1992). We therefore argue that these policies, which have contributed to increased rates of socioeconomic segregation, should be reconsidered and their implementation reformulated.

Methods and Data Sources

The data used in this analysis are derived from three sources. The first is the 1990 U.S. Census Summary Tape File 3A, which summarizes the number and characteristics of persons by census tracts. For this research we used tract-level information describing the racial and ethnic composition, the percentage of students attending private schools, and the percentage of persons whose 1989 family income was below 185% of the poverty level in each tract. We use 185% of poverty, rather than the poverty level, so that the census information coincides with information available on students; to qualify for free or reduced-price lunches, a student's family income must be below 185% of poverty.

Our second source was annual reports describing school-level characteristics in each city (in Philadelphia these are known as the *Management Information Center* or *MIC* reports; in Houston, they are known as *School Profile Reports)*. Our analysis focuses on 172 elementary (usually grades K-6) and 45 middle (usually grades 7-9) schools in Philadelphia, and 169 elementary (grades k-5 or 6) and 39 middle (6-8) schools in Houston. We have used data describing the schools in the 1990-91 academic years. For each school in both districts, we extracted information describing the number of students, the racial composition, the average standardized reading test score[1], the average daily attendance rates, the pupil turnover, and the percentage of students receiving free or reduced-price lunches. Information on the number of students who are provided transportation assistance for voluntary busing is given in Philadelphia, but not in Houston. Houston provides information on the presence of magnet school programs; this information is not given in Philadelphia. We have, somewhat arbitrarily, defined "magnet schools" in Philadelphia as those in which over 30% of the students received mass transit tokens or were bused to school.

Because we were examining the relationships between the nature of schools and the nature of the communities in which they were embedded, it was necessary to link the census information with the school information. Our premise was that the areas where students live, not necessarily the immediate neighborhood surrounding the school, comprise the communities in which a given school is embedded.

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[1] Achievement test scores are provided for each grade represented in each school. The achievement scores provided are not the same for the two districts. In Philadelphia the average national percentile rank is given for each grade. Houston reports the "grade equivalent" test score, which is expressed in terms of the grade and month at which the median student was reading. We have taken the difference between the grade that students are in and their reading level obtained as a measure of achievement. For example, if third graders were reported reading at 3.25 level, they were given an achievement test score of .25. In another school if the median test score for third graders was 2.75, their achievement level was calculated as -.25. We have generated an average test score for the entire school.

Thus it is necessary to know where the students live, to obtain information describing those areas, and to summarize that information for each school.

This task was made possible by our third source of data, Pupil Directory Files. These are databases that include all students enrolled in the public schools. Among other things, they identify the school each student attends and the census tract in which each student resides. Using a computer matching program, data describing each student's census tract were attached to each student's record. These data were then aggregated for each school by calculating the average value of the characteristic for the tracts represented in each school. Thus, if a school draws students from several different census tracts and we are attempting to characterize the rates of poverty among children between the ages of 5 and 17 years, we would multiply the poverty rates of each tract by the number of students living there. These products are then summed for the tracts represented in the school and divided by the total number of students. This creates a weighted average of the poverty rates across the neighborhoods represented in the school (Yancey, Goldstein, & Webb, 1987). After these neighborhood data were aggregated, we merged them with data describing characteristics of the school, thus producing a single data file that summarizes the characteristics of schools and the communities in which they are embedded.

Brief Descriptions of Philadelphia and Houston

While the choice of cities to be studied was determined by the availability of necessary data, the comparison of Philadelphia and Houston provides a contrast between two very different American cities. One is in the "Rust Belt," the other in the "Sun Belt." One is an old manufacturing city currently undergoing transformation to a postindustrial economy (Adams et al., 1991). The second is a postindustrial city with an economy driven by medicine, space exploration, and the administration and distribution of oil (Shelton, 1989).

In 1990 the Philadelphia metropolitan area was larger in population (4.8 million) than Houston (3.3 million). Philadelphia experienced its highest rates of growth during the 19th and early 20th centuries. Since 1950, although the suburban population has continued to grow, the city of Philadelphia's population has declined by 25%. Houston, by contrast, experienced little growth until the 1920s, after which its growth has been exponential. The 1990 population of the city of Houston is 3.8 times larger than what it was in 1950.

The boundaries of Philadelphia have remained unchanged since 1854, whereas Houston has continued to grow by annexation of nearby areas. In 1986 Houston covered 572 square miles, more than four times Philadelphia's 136 square miles. These different histories of geographic and demographic growth have the somewhat anomalous result that, in terms of the proportion of the metropolitan area's population which is in the central city, Philadelphia is more suburbanized than Houston. Only 45% of the Philadelphia region's population lives in the central city; by contrast, 68% of the Houston metro area population lives inside the city limits. On the other hand, if one defines suburbanization not by political boundaries but by population density, one must conclude that the city of Houston is more suburban than Philadelphia. Philadelphia's population density is three times that of Houston.

The City of Philadelphia and the Philadelphia School District share common boundaries. This is not the case in Houston, where the area served by the Houston Independent School District covers about one fourth of the city of Houston, and half of the city's population.

In spite of the differences between the two metropolitan areas, there are striking similarities in the composition and character of the two school districts. In 1990 the number of school-age children was larger in Philadelphia--264,000, compared to 215,000 in the area served by the Houston Independent School District. Yet, as a consequence of the higher rates of attendance in private and parochial schools in Philadelphia (29%), contrasted with 15% in Houston (this information is taken from Summary Tape File 3A of the 1990 Census). Limited to population living in areas served by respective school districts, the number of students served by the Houston system is slightly larger (194,512) than that served by Philadelphia's public schools (190,977).

Table 14.1 summarizes the racial/ethnic and economic characteristics of the two metropolitan areas, the populations served by the two school districts, and the students attending public schools. The two metropolitan areas have similar proportions of their populations that are African American. Houston has a substantially larger Latino population (21.1%) than Philadelphia (3.4%). The majority of Philadelphia's Latinos are Puerto Rican in origin, whereas Houston's Latino population is predominantly Mexican in origin. The proportion of low-income families is higher in Houston (30.6%) than in Philadelphia (21.1%).

Table 14.1
Population Size, Philadelphia and Houston

	Houston	Philadelphia
Metropolitan area	3,301,874	4,856,811
School district	1,206,852	1,585,577
School age population	214,613	263,609
Students, 1990-91	194,548	190,977

These school districts share the common characteristic of providing educational services to higher proportions of minorities and the poor than are observed in their respective metropolitan areas. The percentage of students who are African American, Latino, or low income is more than twice the percentage of the regions' population that has those respective characteristics. This is a consequence of three factors: (a) the concentration of minorities and low-income families in the central city and in the area served by these school districts, (b) differences in the age distribution between racial/ethnic and income groups, and (c) the varying rates at which students choose to attend public schools.

The centralization effects are seen when we compare the racial/ethnic and income characteristics of the metropolitan area populations with the populations served by the districts. Except for Houston's Asian population, which appears to be decentralized, the pattern is clear. There are higher proportions of minorities and low-income families, and lower proportions of whites, living in the areas served by the school districts. It is notable that those parts of Houston not served by the Houston Independent School District had half the rate of low income and minority people than the area of Houston served by the school district.

Comparing the percentage of the population who have these characteristics with the percentage of the school-age population provides an indication of the impact of the age distributions of these groups. In both cities the proportion of the school-age population that is white is lower than the proportion of whites in the total population. By contrast, the younger age structure of African Americans, Latinos, and those with low family income is indicated by the higher proportions of the school-age population with these characteristics.

Finally, comparing the characteristics of the school-age population with the students enrolled in these public school systems provides an indication of the impact of private school choice on the racial and ethnic characteristics of schools. The proportion of white students is lower than the proportion of the school-age population that is white. Conversely, the proportion of enrolled students who are African American, Latino, and low income is higher than the proportion of the school-age population who have these characteristics. Apparently, higher income and white students attend private schools at higher rates.

Segregated Cities and Segregated Schools

The parallels of the two cities in terms of the higher concentration of poor and minorities in the school district and in the schools is repeated when we examine the degree to which the three major racial/ethnic groups are segregated across the metropolitan areas, the central city school districts, and in the schools. Table 14.2 presents levels of segregation, as measured by the indices of dissimilarity[2], of population groups across census tracts comprising the metropolitan areas and school districts, and of students across middle and elementary schools.[3] The segregation of low-income families is the dissimilarity between the distributions of persons whose 1989 income was less than 185% of the poverty level and those whose income was above 185% of poverty across census tracts.

Both cities are segregated by race and ethnicity and, to a lesser degree, economic status. The major difference between the two cities is the higher levels of racial/ethnic segregation which characterize Philadelphia.[4] The difference is particularly marked in the case of segregation between Latinos and whites. In Houston the level of segregation between Latinos and whites is 52, whereas in Philadelphia it is 69. In both cities the highest level of segregation is found between African Americans and whites; the lowest level, between whites and Latinos.

Comparing the levels of racial segregation across the entire metropolitan areas to those found in the central city school districts indicates that racial segregation across the census tracts served by the school districts is higher than the segregation found across the entire metropolitan area. Thus, the areas served by these school districts not only have higher proportions of minorities but are also more highly

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[2] The index of dissimilarity reflects the difference in the distribution of two groups across a series of nominal categories. In the case of residential segregation, it reflects the difference in the percentage distributions of two groups across census tracts. One interpretation of dissimilarity is that it reflects the proportion of either group that would have to move from census tracts which they now dominate to other tracts in order to balance the two distributions. Thus, in 1990, 82% of whites would have to change census tracts in order to achieve racial integration. For details of calculation methods, see Taeuber and Taeuber (1965).

[3] Our measure of segregation of schools does not take into consideration levels of segregation *within* schools (Oakes, 1992). To the degree that minorities or low-income students are placed in special programs or tracts within schools, these measures underestimate the segregation of students.

[4] An additional analysis examining residential segregation of racial/ethnic groups by poverty status indicated that the lower level of segregation of Houston's white and Hispanic populations is particularly marked among lower status whites who are residentially integrated with Houston's Latino population.

Table 14.2
Racial/Ethnic and Economic Characteristics of the Houston and Philadelphia Metropolitan Areas, School Districts, School-Age Populations, and Public School Students

Houston

	White	African American	Latino	Asian	Low-Income*
Metropolitan area	56.5	18.2	21.1	3.7	30.6
School district	38.6	28.0	30.3	2.8	42.5
School age population	21.9	33.0	42.4	2.7	47.5
Students 1990-91	14.3	38.1	44.9	2.6	54.6

Philadelphia

	White	African American	Latino	Asian	Low-Income
Metropolitan area	75.4	18.9	3.4	2.1	21.1
School district	52.2	39.5	5.3	2.7	36.8
School age population	40.6	47.7	8.4	3.3	42.4
Students 1990-91	23.1	62.6	9.7	4.4	61.2

* Because the census does not provide specific data, there are two estimates in these tables. The size of the white population age 5-17 is defined by subtracting African-American, Latino, and Asian populations from the total. Data on race and Hispanic origin is not available by age groups. Secondly, data are not available describing the number of school-age persons who are below 185% of poverty. The number of persons age 5-17 whose household income falls in this category is estimated by assuming the percent of the population between the poverty line and 185% of poverty who are age 5-17 is the same as the proportion of the population below poverty who are school age. To the degree that "low-income families" have lower fertility than those below poverty, this overestimates the number of the school-age population who are of low income.

segregated. Economic segregation across both metropolitan areas is moderately higher than in the areas served by the two central city school districts.

Given the segregation of the population across these school districts, coupled with the fact that schools generally draw students from relatively restricted geographic areas, it is expected that the level of segregation in schools will reflect the segregation of neighborhoods. While there are strong correlations, the patterns are far from perfect. The segregation between African Americans and Latinos, and between Latinos and whites, is *higher* among students in schools than it is among the residential population across the school districts. Conversely, the segregation of African-American and white students across schools is *lower* than the segregation of the African-American and white populations across census tracts within the school districts. The segregation of students who are qualified for free or reduced-price lunches is markedly *higher* than the segregation of populations whose family income was less than 185% of the poverty level from those with higher incomes.

These anomalies, although relatively small, indicate that there are factors beside the ecological organization of cities and their neighborhoods which affect levels of segregation in schools. In spite of the expected parallels between the racial and economic character of the cities' neighborhoods and the racial and economic character of the schools, the two are not mirror images of one another.[5] There are at least two factors which distort the reflection. The first distortion stems from the fact that not all school-age children attend public schools. As Table 14.3 shows, minorities and students from low-income families are more likely to attend public school. To the degree that private school attendance varies across a city's neighborhoods, it affects the correlation between the character of neighborhoods and the character of schools.

The second distortion is found in the degree to which students attend schools outside their immediate neighborhoods rather than near their homes. In order to increase the level of racial integration, both school districts have established magnet school programs in which selected schools provide special programs designed to attract pupils from throughout the school district. Participation in magnet school programs is not random, nor is it evenly distributed across neighborhoods in these cities. Students and their families must make the investment of applying to and participating in these programs, and all students who apply are not accepted (for example, high-achieving students are more likely to be accepted). These factors result in class differences in students who do and do not attend magnet schools (Henig, 1995; Kozol, 1991; Moore & Davenport, 1990; Witte, 1993). To the degree that magnet school programs select certain types of students away from local neighborhood schools, they distort the relationship between neighborhood and school characteristics.

In order to examine the effects of students' choosing to attend private or magnet schools on school segregation patterns, we have conducted a series of multiple regression analyses which relate the characteristics of school communities to the student body composition of schools. We examined four school composition variables: The percentage of students from low-income families, and the percent who were African American, Latino or white. To determine the effect of choice factors on school composition, we examined several antecedents. The first are the corresponding school-community characteristics (that is, the percentage of poor students in each school and the percent of poor children in each school's neighborhood). For each of these analyses we also included the percentage of children in the school communities who (1) attended private schools and (2) a dummy variable designating whether a school was a magnet school. The results are presented in Table 14.3.

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[5] The bivariate correlations between the characteristics of census tracts included in school feeder areas and the characteristics of students are presented below.

Correlations Between Characteristics of Community Areas and Schools

	% Low Income	% African American	% Latino	% White
Philadelphia	.799	.966	.980	.959
Houston	.723	.966	.932	.868

The results obtained for the two cities are similar. They indicate that the racial and economic character of the residential areas in which a school is embedded is highly correlated with the racial and economic composition of schools. Beyond this there appear to be different models of school composition for white, low-income and minority students. Concentrations of white students are associated with communities with high rates of private school attendance, and with schools designated as magnets. The opposite is found for low income students who are concentrated in neighborhood schools with low rates of private school attendance. The results for African American and Latino students indicate that the racial/ethnic composition of the communities acts as a powerful determinant of the racial/ethnic composition of schools. Beyond this there are weak, although significant positive effects of private school attendance. This indicates that the percentage of African American and Latino students is higher than expected (given the school-community population) in schools drawing from communities where private school attendance is high. In other terms, it suggests that withdrawal of whites from the public school system results in increased minority percentages in many schools. Although magnet school programs are designed in part to achieve racial integration, the results indicate that, with the exception of African American students in Houston, minority students are under represented in magnet schools.

Finally, the relationships between the economic and racial composition of communities and the composition of schools are not linear.[6] The curvilinear nature of these relationships indicates that schools drawing students from communities which are economically heterogenous and are racially mixed have higher proportions of low-income, African-American, and Latino students than is expected given the communities from which they draw students. The equation for white students complements these results; white students living in racially mixed communities are less likely to attend local public schools. The proportion of white students rises sharply as one moves to school-communities which are dominated by whites. We interpret this to mean that the presence of private and magnet schools does not evenly siphon students from neighborhood schools; the abandonment of neighborhood schools is selective.

There are at least three consequences of these distortions of the relationships between the character of communities and the characteristics of schools. First, the percentage of public school students who are minorities or from low-income families is substantially higher than the percentage of the school-age population served by these school districts (see Table 14.1). This increased proportion of low-income and minority students is higher in schools which are embedded in communities with high rates of private school attendance.

Second, the regression results suggest that magnet schools have higher proportions of high-income and white students than is expected given the nature of their school-communities. The degree of over or underrepresentation of students attending magnet and neighborhood schools, by race/ethnicity and family income, is indicated in Table 14.4, which provides the distributions of students from these different groups in these two types of schools.

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[6] By squaring the community composition variables and including them in the equations shown in Table 3 significantly increases R^2 in most instances. These changes in R^2 are shown in Table 3 on the lines labeled "R Square 2." We have not shown the full equations which include the square terms; multi-conlinearity between the community composition variable and its square results in Beta weights which exceed 1.00. Nonetheless, the coefficients found for the effects of private school attendance and magnet schools remain similar to those shown in Table 14.3.

Table 14.3
Racial/Ethnic Segregation in Houston and Philadelphia: Metropolitan Areas, School Districts, and Schools

Houston

	Population Across Tracts		Students Across Elementary and Middle Schools
	Metro. Area	District/ City	
African American/White	67	72	62
African American/Latino	59	68	66
Latino/White	50	52	56
Low Income/Other	38	35	48

Philadelphia

	Population Across Tracts		Students Across Elementary and Middle Schools
	Metro. Area	District/ City	
African American/White	77	84	74
African American/Latino	67	71	78
Latino/White	64	69	70
Low Income/Other	42	35	44

In Houston, while some 30% of all elementary and middle school students attend magnet schools 20% of low-income students and 22% of Latino students do so. Thirty-two percent of Houston's African American students attend magnet schools indicated they are slightly over represented. This over-representation is substantially smaller than the 53% of white students and 51% of those who are not low income who attend magnet schools. A similar pattern is found in Philadelphia, where some 19% of all students attend magnet schools, yet only 12% of African-American and Latino students and 14% of those with low family incomes--compared to 36% of white students and 36% of those whose family incomes are above 185% of poverty--attend magnet schools. The effects of these magnet school programs complement the effects of students' choices to attend private schools. A two-tiered system has emerged among public schools, one which is overrepresented by white students from higher-income families, a second which is overrepresented by minorities and low-income students.

Table 14.4
Results of Regression Analyses of Characteristics of Community Areas and Students for Magnet and Other Schools

Philadelphia

Community-Level Characteristic	Percent Low Income	Percent African American	Percent Latino	Percent White
X	2.433	1.6326	1.222	.362
X^2	-.0186	-.0053	N.S.	.0067
Percent private		.302	.053	N.S.
Magnet program	-10.952	-3.894	N.S.	6.041
a	16.793	-9.83198	-1.9314	-1.552
R^2	.771	.945	.962	.938

Houston

Community-Level Characteristic	Percent Low Income	Percent African American	Percent Latino	Percent White
X	2.100	1.339	1.967	-.0195
X^2	-.0121	-.0027	-.0087	.0101
Percent private		.496	.325	N.S.
Magnet program	-19.7397	N.S.	-6.641	5.9429
a	9.1447	-6.301	-8.407	1.0568
R^2	.635	.944	.906	.837

The third consequence of these processes of choice and selection across schools in these districts is their impact on the racial and economic segregation of students. As we have indicated above, the magnet school programs in these cities were created, in part, as a means of enhancing racial integration by providing programs that attract both white and minority students from across the school districts. Evidence indicates these programs have succeeded in this goal, particularly in regard to the degree of segregation between African-American and white students, which is lower in the public schools than across the school districts' neighborhoods. Moreover, they have most likely reduced the number of white students who might otherwise attend private schools.

We have seen that magnet school programs have created a two-tiered school system within public schools--one dominated by minorities and low-income students and a second overrepresented by whites and students from high-income families. Thus, magnet schooling leads to a paradoxical result: It (slightly) reduces racial segregation across *all* schools while creating a racial and economic divide between magnet and neighborhood schools. Some of the racial and economic segregation that exists among all public schools is the result of these two tiers. In order to increase the level of racial integration across the entire district, the effectiveness of these programs must overcome the segregation which they generate. Their success in doing so is indicated by the levels of racial and economic segregation which exist among magnet schools compared to neighborhood schools. Table 14.5 presents indices of dissimilarity across neighborhood schools and across magnet schools by race and ethnicity and family income level.

The impact of these programs in both cities is similar. For every comparison, the level of racial segregation is lower among students attending magnet schools. This is particularly marked for African-American and white segregation. Segregation between Latinos and African Americans, and Latinos and whites, is also lower in magnet schools. Students attending magnet school are also less segregated by socioeconomic status, although the effects in Houston are minimal.[1]

One means of illustrating the impact of these programs on the economic and racial composition of schools is to measure the degree to which students are attending schools which are dominated by their own racial/ethnic or income group. Imagine asking the question for the average African-American student: "What percentage of the students in the school which you attend are also African American"? We have done this for African-American, Latino, and low-income students, and computed the average percentage for the entire school system, for magnet schools, and for neighborhood schools.

The results, presented in Table 14.6, are similar in the two school districts. African-American students attending magnet schools attend schools which on the average are 52% and 45% African American. By contrast, African-American students who attend neighborhood schools attend schools which average 73% and 88% African American. Similar patterns are found for Latino students. Those who attend neighborhood schools attend schools which are dominated by Latinos. In Philadelphia, where Latino students are less than 10% of all students, the 90% of Latino students who attend neighborhood schools go to schools which are over 50% Latino. Finally, in the case of low-income students, we see that across the entire district the average low-income student attends a school that is over 75% low income. The concentrations of low-income students are smaller for the 20% who are attending magnet schools. Yet those who attend neighborhood schools go to schools in which over 80% of their fellow students are also qualified for free or reduced-price lunches.

When we compare the levels of segregation found among neighborhood schools to that of magnet schools, we are led to the conclusion that the impact of these programs on most minority and low-income students is minimal. Most attend schools which are characterized by higher proportions of students of a similar race/ethnicity. The "success" of the magnet school programs in reducing racial segregation has depended on attracting higher status students away from neighborhood schools located in relatively poor neighborhoods. The result is an increased concentration of poor students in racially and economically homogeneous schools.

Race and Class Concentrations and School Success

We now turn to an examination of the relative impact of racial and social economic concentrations on school success. Many studies have investigated the influence of racial segregation on the academic achievement of African-American students. Indeed, the 1954 Brown decision was supported by a considerable amount of evidence regarding the negative impact of segregation upon African-American

Table 14.5
Percent of Students Attending Local and Magnet Schools by Race and Family, Houston and Philadelphia

Houston	African American	Latino	White	Low Income	Higher Income	Total
Local schools	69	78	47	80	49	70
Mag. schools	32	22	53	20	51	30

Philadelphia	African American	Latino	White	Low Income	Higher Income	Total
Local schools	88	88	64	86	64	81
Mag. schools	12	12	36	14	36	19

Table 14.6
Segregation of Students Attending Neighborhood and Magnet Schools: Houston and Philadelphia

	Houston		Philadelphia	
	Neighborhood Schools	Magnet Schools	Neighborhood Schools	Magnet Schools
African American/white	72	42	80	27
African American/Latino	73	46	81	53
Latino/white	53	44	73	50
Low income/other	41	40	39	30

children. There also exists a body of research documenting the importance of concentrations of neighborhood and school poverty on the academic success of individual students (Crane, 1991; Mayer, 1991; Garner and Raudenbush, 1991; Myers, 1985). Here we focus on the effects of racial and economic segregation on the success of schools (as measured by the average reading achievement level).

The effects of concentrating large numbers of students from particular racial or ethnic groups, or from low-income families, may be understood in two somewhat different ways. First, it could be argued that it reflects the cumulative effects of individual student characteristics. For example, schools with large numbers of low-income students are expected to produce lower average achievement scores because of the contribution of each individual student to the school-wide average. Alternatively, cultural, ecological, or organizational effects may be generated when students with particular characteristics are concentrated in a given school. For example, concentrations of low-income students may contribute to the creation of a negative climate among teachers (that is, "these kids can't learn"). Magnet schools specializing in science or the arts ostensibly generate an informal culture among students which reinforces formal learning in classrooms. Ethnographers have also argued that large concentrations of low-income and/or minority students may generate an informal culture within the school which may erode the formal learning in classrooms (Ogbu, 1974, 1988; Solomon, 1992; MacLeod, 1987). Concentrations of students from particular economic groups may also have structural consequences on school characteristics, such as rates of student turnover and absenteeism. High rates of turnover and/or absenteeism make it difficult for teachers and students to follow a coherent curriculum over the school year. High turnover contributes to the social disorganization of the school and to the informal community of students.

The data which are available make it impossible to separate the cumulative effects of individual characteristics from the organizational/ecological effects of concentrations of racial groups or poverty. To do so would require that we have information describing both individual students and their families, as well as information describing the compositional and organizational characteristics of schools (see Bryk and Raudenbush, 1992; Pallas, 1994; and Bidwell & Kasarda, 1980).

As a consequence of both historical and contemporary patterns of racial discrimination, coupled with the segregation of schools by race/ethnicity and socioeconomic status, there are substantial correlations between the percentage of students who are African American and/or Latino and the percentage of students who are from low-income families. These correlations are found not only in schools, but also in the neighborhoods (census tracts) comprising the school districts. We have just seen that in both Houston and Philadelphia the African-American and Latino populations are segregated, in the cities and schools. Across the census tracts and schools in both cities there are strong correlations between rates of poverty and the proportion of the tracts' population that is African American or Latino. Given the strength of the correlations (.612 in Philadelphia and .757 in Houston) between the presence of minorities and concentrations of low income, it is impossible to separate the effects of these characteristics of student populations.

In addition to the racial composition of students and the percentage of students who are qualified for free or reduced-price lunches, the school profile databases include information describing some of the elements of the academic climate of the schools: the average daily attendance, the rates of student mobility into and out of each school, and the average achievement test scores. There is also information describing characteristics derived from policy decisions: school budgets; student/teacher ratios; the presence of magnet programs; and the tenure, training, and attendance rates of teachers.

Although we initially included a large number of characteristics, there were only three--in addition to racial and economic composition--which were found to have independent effects on student achievement. These were rates of student turnover or mobility, the average daily attendance, and whether a school is a magnet school.[7]

The results of the regression analyses are presented in Table 14.7, showing the standardized regression coefficients for those characteristics which were significantly (beyond the .05 level) related to the average level of achievement.

The basic results are similar for both cities. Schools with higher proportions of students who qualified for free or reduced-price lunches, with higher proportions of minority students, and with higher rates of student turnover had lower achievement test scores. Higher rates of attendance are associated with higher test scores in Philadelphia, although not in Houston. Finally, there are significant and positive effects of magnet school programs on test scores. These programs are effective in teaching and/or in attracting the better students away from neighborhood schools.

The regression results also provide a partial answer to the question of the impact of concentrations of racial/ethnic minorities and concentrations of low-income students on achievement test scores. The standardized regression coefficients are indicative of the relative importance of the variables included in the analysis. While all of these variables are statistically significant, the Beta weights for the percentage of low-income students are larger than the Beta weights for the percentage of students who are minorities. The difference is substantial among Philadelphia schools (-.539 and -.137) and less dramatic in Houston (-.399 and -.279). These results indicate that the economic characteristics of students are more important than their racial characteristics as determinants of school success. These results also indicate that the interactions between race and class are not significant.

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[7] Some of the other characteristics, such as the percentage of experienced teachers, were found to be correlated with higher achievement scores, but their effects proved to be spuriously tied to the economic composition of student bodies. Apparently, experienced teachers opt to teach in schools with fewer low-income students. In Houston, the zero-order correlations indicated low student/teacher ratios were associated with *lower* achievement scores. This correlation is also spurious--a consequence of the lower student/teacher ratios found in schools with higher proportions of low-income students.

We have already noted that in both cities, but particularly in Houston, these characteristics of schools are so highly correlated that it is impossible to measure one of these variables without the confounding effects of the second. Regression analysis provides a means of partitioning the explanatory power of two variables. We do this by computing the variance in achievement score which is explained by each of the two variables alone, as well as the two variables simultaneously. The variance which is explained by both variables simultaneously is composed of three parts: (a) that which is attributed to racial/ethnic concentrations alone, (b) that which is attributed to low-income concentrations alone, and (c) that which is shared by both income and racial concentrations. To partition explained variance in this way, we have run a series of regression analyses in which different variables were added to the equations in a stepwise fashion. The resulting R²s reflect the total variance that is explained by the variables included in each step. Table 14.8 presents the results of this series of analyses for the two school districts.

Table 14.7
Within-Group Contact of African-American, Latino, and Low-Income Students for All Schools, Magnet Schools, and Neighborhood Schools: Houston and Philadelphia

Houston	All Schools	Magnet Schools	Neighborhood Schools
African American	66.7	51.7	73.3
Latino	69.6	49.3	75.4
Low income	76.0	56.6	80.8

Philadelphia	All Schools	Magnet Schools	Neighborhood Schools
African American	82.9	45.1	87.7
Latino	50.7	19.6	54.5
Low income	82.3	63.0	85.4

The first two lines provide the percentage of the variance which is explained by using the percentage of students who are minorities. These percentages are 39% in Philadelphia and 55% in Houston. The second line indicates that, using only the percentage of students who are low income, one may explain 77% of the variance in Philadelphia and 61% in Houston. As with the Beta weights, these bivariate relationships indicate that economic concentrations are more important than are racial concentrations as determinants of school success.

Table 14.8
School-Level Factors Affecting Average Reading Achievement: Philadelphia and Houston Elementary Schools

	Standardized Regression Coefficients	
	Philadelphia	Houston
Percent low-income students	-.589	-.399
Percent minority students	-.137	-.279
Student turnover	-.108	-.162
Average daily attendance	.172	N.S.
Presence of magnet program	.089	.107
Explained variance R^2	.812	.652

The problem of shared variance is depicted on the third line, showing that the variance which is explained by the economic and racial character of students *taken together* is substantially smaller than the sum of the variances which they explain alone. To ascertain the amount of variance which may be attributed solely to concentrations of minorities or low-income students, we compute the difference between what is explained by one and two variables. For example, among Philadelphia schools the variance which may be attributed to concentrations of low-income students alone is the variance which is added by income. Or, the variance explained by two variables minus the variance explained by percent minorities alone [.772-.394=.378]. Conversely, we calculate the variance which is due to racial concentrations by subtracting the difference between what is explained by income concentration alone from the variance which is explained by both variables simultaneously, that is, .772-.769=.003. The amount of explained variance that is *shared* by economic and racial character of the schools is obtained by subtracting these estimates of independent variance (.003 and .378) from the total variance explained by both variables, that is, [.772-(.003 +.378)=.391]. We have repeated these calculations for both Philadelphia and Houston, and for each of the variables which has been included in these analyses. The results are summarized in the second half of Table 14.9.

Several conclusions may be drawn from these results. First, as indicated by the bivariate R^2, and by the variance which is explained by the racial and economic character of schools, the concentration of low-income students is the more important determinant of student achievement. The differences between the effects of these two characteristics are substantial among Philadelphia schools, yet relatively small among Houston's schools. The second, and perhaps most important, conclusion is that not only are the racial and economic character of schools correlated, but the explained variance which they share is greater than the variance which may be attributed to either alone. Indeed, in Houston the amount of explained variance which is shared between minority and low-income concentrations (53%) makes up for more than 80% of the total variance which is explained. Among Philadelphia schools, the shared variance (38%) is almost half of the total explained variance. Finally, we can see that, when they are entered into the stepwise analysis *after* low-income and racial composition, the amount of variance that may be attributed to other characteristics of schools (student mobility, attendance, and the presence of magnet programs) is substantially smaller than that which is explained by their racial and class character.[2]

Table 14.9
Explained Variance in Average Achievement Scores by Different Multiple Regression Analyses

Characteristics Included in Analysis	Philadelphia	Houston
Percent minority alone	.394	.545
Percent low income alone	.769	.614
Minority and income	.773	.622
Percent low income, percent minority, attendance, and mobility	.806	.645
All Variables	.812	.652
Variance Attributable to:		
Percent low income	.378	.077
Percent minority	.004	.009
Shared income and minority	.390	.536
Mobility and attendance	.033	.022
Magnet programs	.006	.007
Total Explained Variance	.812	.652
Unmeasured Factors	.188	.348

Summary and Conclusion

The racial and economic character of student populations is the outcome of the racial and economic segregation of cities into neighborhoods of relatively homogeneous groups, the propinquity of students and schools, parental/student choice for private or public schools, and magnet school "choice" programs. In spite of the fact that this investigation has included two very different cities, the results which have been obtained regarding the impact of neighborhood segregation, parental-student choice, and the development of magnet school programs are strikingly similar.

A major difference between the schools of Philadelphia and those of Houston appears in part to be a result of the pattern of segregation between Latino and white populations. In Philadelphia these populations are segregated to a much greater extent than they are in Houston. The outcome of this social character of the city is that in Philadelphia there are several neighborhoods which are predominantly white and low-income areas. In Houston such neighborhoods and schools are relatively rare as a consequence of the residential integration of low-income whites with the Latino population. The outcome is that the relationship between percent minority and percent low incomes is much stronger in Houston than in

Philadelphia. Philadelphia has poor white schools, and several schools which are middle income and African American. Both of these are rare in Houston.

We have also seen that, in addition to the effects of the ecological structure of these cities and their neighborhoods, school policy has had direct effects upon the patterns of racial and economic integration of the schools. Magnet school programs, characterized by voluntary busing of selected students from distant areas, have reduced the degree of racial segregation between African-American and white students in the public schools. This effect appears to be limited to students attending magnet schools.

There have been two important secondary consequences of these programs. First, they have created a two-tiered system of schools within these two public school systems. Second, they have increased the degree of economic segregation, both between magnet and neighborhood schools and among neighborhood schools. Students from higher-income families living in economically heterogeneous neighborhoods are more likely to attend magnet schools, thereby increasing the proportions of low-income students in the neighborhood schools.

Our analysis of the impact of racial and economic concentrations of students and other characteristics of schools indicates that the most important determinant of academic success is the proportion of students who are from low-income families. The failure of such schools is the result of a series of characteristics such as the withdrawal of resources, diminished teacher commitment, and alienated families and communities. These schools are also characterized by higher rates of student turnover and lower attendance and higher rates of disorder. A prescription for school failure must include concentrating minority populations in poverty. That has occurred in both of these cities and particularly in their neighborhood schools.

Over the last decades following the 1954 Supreme Court decision, a substantial amount of educational resources have been invested in efforts to reduce levels of racial segregation in schools. There has been a corresponding amount of social science research and debate generated around the necessity and outcome of these efforts. Our research has focused on two very different school districts which have established similar and successful programs to reduce racial segregation. These programs have had the unintended consequence of increasing concentrations of low-income students in neighborhood schools.

One of the important lessons which should be derived from this analysis is that policy interventions which focus on relatively narrow outcomes are likely to have consequences which are not anticipated. School systems are systemic--change in one element is likely to reverberate throughout the system. Policy development must be broadly, not narrowly, conceived and implemented. The second major conclusion which must be drawn from this analysis is that, (at least in these two cities) if the choice must be made between reducing racial segregation or economic segregation, the latter is more important for academic achievement. The agenda for change in public schools must include efforts to reduce the concentrations of low-income students. Finally, a note regarding magnet schools. They are clearly successful--either as a consequence of the nature of the programs which they provide or of the students they attract, or both. The problems which they generate are systemic and selective, not internal. We see them as important models for urban schools if they are inclusive and widespread rather than exclusive and concentrated in a relatively few (often better off) neighborhoods.

Endnotes

[1] The level of socioeconomic segregation among magnet schools in Houston is in part a consequence of the development of magnet school programs in several schools which have high proportions of low-income students. Thus, within the Houston magnet school system, while most magnet schools have relatively low numbers of low-income students, there are a few truly exceptional schools which provide magnet school programs for low-income students.

[2] The calculations we have presented in Table 9 are based on the assumption that these other characteristics are independent of the racial and economic character of student populations. In fact, we know that this is an incorrect assumption. Indeed, we have seen in the first half of this paper that magnet programs have a direct effect upon both the racial and economic character of schools. The model which we used assumed that racial and socioeconomic compositions of students and school policy were exogenous (independent) variables. The character of the academic climate (measured here by rates of attendance and student mobility) is viewed as dependent upon the exogenous variables. Examination of the zero-order correlations indicates that attendance and mobility are correlated with the percentage of students qualified for free or reduced-price lunches. Lower attendance rates and higher rates of student turnover are associated with higher proportions of low-income students. In Philadelphia lower attendance and higher rates of student mobility or turnover are associated with schools containing larger proportions of Latino students. This reflects the mobile character of the city's Latino population. In Houston the opposite pattern is found--schools dominated by either Latino or African-American students have lower rates of turnover. We have conducted these analyses and partition-explained variance following each of these alternative models. That analysis indicates that a small proportion is attributable to racial character and a much larger proportion should be attributed to the economic composition of schools. Given the ambiguity and complexity of the nature of these relationships we finally resolved not to attempt to partition the variance in achievement scores which was accounted for by these characteristics to either the racial or economic composition of the schools.

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Fifteen:

POST-SECONDARY EMPLOYMENT AND EDUCATION STATUS OF INNER-CITY YOUTH: CONVENTIONAL WISDOM RECONSIDERED

William Stull and Michael Goetz

INTRODUCTION

It is commonly believed that the majority of adolescents growing up in the inner city are trapped in a self-fulfilling cycle of failure brought about by the poverty and hopelessness of their environment. Initial setbacks in school and the labor market lead to discouraged student and worker effects which feed back and cause additional setbacks in both arenas and further losses of self-confidence. According to this view, most of the young people caught in this downward spiral eventually cease pursuing conventional careers and settle instead into lives of irregular employment, welfare dependency, crime, drug abuse, or some combination of all of these.

The purpose of this paper is to present some statistical evidence which paints a different picture of inner-city youth. Using data from a national longitudinal survey of high school students, we show that inner-city young people display considerably more resilience than they are usually given credit for. We do this by comparing the employment and education profiles of inner-city and noninner-city students over a six-year time horizon beginning with the second semester of their sophomore year in high school. Our results indicate that inner-city youth get off to a slower start than their noninner-city counterparts with respect to certain broad measures of labor market and school success, but then "catch up" to a significant degree in the early years after high school. This research is part of a larger project on the transition from school to work in the inner city being carried out by the authors. A more extended version of the paper may be obtained upon request (Stull & Goetz, 1993).

Over the past 20 years the National Center for Education Statistics has undertaken three large longitudinal surveys of American high school students: (a) the National Longitudinal Study of the High School Class of 1972, (b) High School and Beyond (1980), and (c) the National Education Longitudinal Study of 1988. We use the High School and Beyond (HS&B) survey because it is the only one of the three that provides relatively recent national data on both the secondary school and postsecondary school experiences of young people. The HS&B database contains information on two cohorts of students: those who were sophomores in 1980 and those who were seniors (Sebring et al., 1987). Each cohort was surveyed in the spring of 1980, 1982,]984, and 1986. Substantial efforts were made to ensure a high response rate so there was little attrition from one wave of the survey to the next.

The research results reported in this paper are based on data from the sophomore cohort. The sophomores were chosen for two reasons. First, we wanted to include dropouts in our analysis and, second, we wanted two years of observations on the students' high school experiences. Approximately 15,000 sophomores were selected to participate in all four waves of the HS&B survey. Of these, 11,683 (78.8%) actually did so. We refer to this last group as the full participation cohort.

Definition of Inner City

Our analysis is based on a division of the full participation cohort into inner-city and noninner-city subcohorts. After some experimentation, we chose a definition of inner city based on school location and family socioeconomic status (SES). Specifically, a respondent is defined to be an inner-city student if both of the following conditions hold:

(a) He or she attended an urban high school in 1980.
(b) He or she had a family with low SES in 1980.

For the purposes of this definition an urban high school is one which was located in the central city of an SMSA in 1980. A more focused classification which would restrict the analysis to students who attended schools located in particular parts of these cities (for example, high poverty areas) is precluded by the confidentiality requirements of HS&B. A low-SES family is one which scored below the median in 1980 on an HS&B SES composite variable made up of five equally weighted components: father's occupation, father's education, mother's education, family income, and material possessions in the household. Students who attended nonurban high schools, had high-SES families, or both are defined to be noninner-city students.

When this definition is applied to the full-participation cohort, 1,648 students (14.1%) are classified as inner-city students and 10,035 (85.9%) as noninner-city students. When the two groups are compared using various socioeconomic indicators they differ from one another substantially (Stull & Goetz, 1993). In addition to the SES and school location differences that are used to define them, inner-city youth are much more likely than noninner-city youth to be minority group members, to live in the northeastern part of the United States, and to attend public schools. They also on average have lower test scores and grades. These differences are all in the expected direction and suggest that inner-city high school students are a population with both special characteristics and special problems.

RESULTS

In order to track the progress of the inner-city and noninner-city subcohorts as they moved through high school and then out into a variety of postsecondary activities, we created a set of profile tables for both groups showing their joint employment and education status at three points in time: 1980, when they were sophomores, 1982 when those who remained in school were seniors, and 1986 when those who graduated on time had been out of high school for four years (Stull & Goetz, 1993). These tables distinguish between part-time and full-time work and also between part-time and full-time schooling. Since space is limited here, we present two summary tables derived from this effort.

Table 15.1 uses two indices of educational attainments--school attendance and possession of a high school diploma--to show how the education status of the two subcohorts changed over the HS&B time horizon. In 1980, all students were sophomores in high school, so the school attendance rate was 100% and the diploma rate was zero for both groups. By 1982 many students no longer attended their original school. Some graduated early, others transferred to another school, and still others dropped out. The second row of Table 15.1 shows that the school attendance rates for inner-city youth and noninner-city youth in that year were 73.2% and 83.0% respectively. After adjusting these figures for early graduation rates (shown in the third and fourth columns), they tell us that the short-term dropout rate was 22.7%

Table 15.1
School Attendance and High School Diploma Rates for Subcohorts: 1980, 1982, and 1986

Year	School Attendance Rate		High School Diploma Rate	
	Inner City	Noninner City	Inner City	Noninner City
1980	100.0%	100.0%	0.0%	0.0%
1982	73.2%	83.0%	4.1%	3.1%
1986	27.7%	39.6%	86.1%	92.5%

Table 15.2
Labor Force Participation and Unemployment Rates for Subcohorts: 1980, 1982, and 1986

Year	L.F. Participation Rate		Unemployment Rate	
	Inner City	Noninner City	Inner City	Noninner City
1980	56.6%	55.9%	42.6%	27.5%
1982	72.5%	74.6%	27.3%	19.0%
1986	80.1%	76.1%	10.5%	7.7%

for the inner-city subcohort and 13.9% for the noninner-city subcohort--a difference of 8.8 percentage points. This difference is consistent with our a priori expectation that dropout rates should be significantly higher among inner-city youth than among noninner-city youth.

The third row of the table shows the education status of the two groups in 1986. Virtually all of the young people still in school at that time were attending two- or four-year institutions of higher learning. There are two things to note about these figures. First, by subtracting the diploma rates from unity long-term dropout rates for the two groups can be calculated--13.9% for inner-city students and 7.5% for noninner-city students, a difference of 6.4 percentage points. Comparing these to the corresponding short-term rates we see that almost 40% of the 1982 inner-city dropouts and 50% of the noninner-city dropouts had earned a diploma by 1986, either through the GED equivalency process or other means. The dropout "gap" between the two groups thus declined over the four-year period. Second, the school attendance rate for inner-city students in 1986 was 11.9 percentage points below that of the noninner-city students but most of this difference can be accounted for by the higher (short-term) dropout rate of the former. If an inner-city student graduated "on time," he or she had only a slightly smaller probability of attending a postsecondary educational institution four years later than did a noninner-city graduate.

Table 15.2 presents the labor force participation and unemployment rates for the two groups. The first two columns show that the inner-city and noninner-city labor force participation rates increased in tandem from 1980 to 1986. There thus appear to be no important discouraged worker effects among the inner-city young people. The story told by the second two columns is more complex. In 1980, as one would expect, the inner-city unemployment rate was much higher than the noninner-city rate--a difference of 15.1 percentage points. Thereafter, both rates declined as the young people matured, but the inner-city rate fell much faster than the noninner-city rate. By 1986, the former was only 2.8 percentage points above the latter. This convergence cannot be explained by macroeconomic factors because the U.S. economy was contracting between 1980 and 1982 and expanding between 1982 and 1986. Instead, the results suggest a learning-by-doing model of job search in which inner-city youth have the same attachment to the labor force as noninner-city youth (as shown by their identical labor force participation rates), have fewer job search skills and employment opportunities initially, but then eventually learn enough about where jobs are and how to get them to almost catch up to their noninner-city counterparts.

The foregoing results do not support the conventional wisdom which predicts irreversible and increasing despair among inner-city adolescents as they leave high school and enter the "real world." Far from exhibiting discouraged worker or discouraged student effects, these young people appear to be quite resilient in the face of the hardships they encounter. Dropouts return to school to earn their diplomas; the unemployed continue to search for jobs until they find them; students from deprived family and school backgrounds pursue postsecondary education. All of these phenomena suggest that the negative stereotype of the inner-city high school student needs some revision. In future research we plan to estimate some econometric models which will explain why and under what circumstances inner-city students achieve the successes we seem to have discovered.

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A NOTE ON THE HONOREES

Edmund W. Gordon is the John M. Musser Professor of Psychology, Emeritus, at Yale University and formerly the Richard March Hoe Professor of Education at Teachers College, Columbia University. Currently, he serves as Distinguished Professor of Educational Psychology at the City College and at the Graduate School of the City University of New York (CUNY). He is the founder and current Director of the Institute for Research in the African Diaspora in the Americas and the Caribbean at CUNY.

Professor Gordon's distinguished career spans 45 years, during which he has contributed to professional practice and scholarship as a clinical and counseling psychologist, research scientist, government official, professor, author, editor, and university administrator. In carrying out these diverse roles, he has advanced a national research and policy agenda on the needs of children and youth who, due to challenging life circumstances, are placed at risk of educational failure and limited life opportunities His scholarship has identified research fronts and charted new directions for psychologists and educators confronting the pressing concerns of human diversity and development. He has maintained a vigorous presence in the national dialogue concerning the equitable provision of educational opportunities and resources for all our nation's children, but especially racial and ethnic minorities who are economically and educationally disadvantaged. Professor Gordon has earned his eminent reputation in the national and international research and practitioner communities by being an interpreter of psychological and educational research as well as a producer of new knowledge.

As a scientist, Professor Gordon is an authority on human diversity. His long-term program of research in this area has contributed in fundamental ways to the application of psychology concerning human diversity and pedagogy, the modifiability of cognitive functions, race and intelligence, the education of low-status populations, life-course analysis of persons who defy negative predictions of success, and knowledge production in the social sciences. In addition to the impact of his scholarship on practice, Professor Gordon's work has played a key role in influencing policy concerning educational equity, child welfare, and health and social service delivery for meeting the pressing needs of disenfranchised children and youth.

Professor Gordon's distinguished contributions to the field of psychology and the impact of his work on practice and policy are widely celebrated by his colleagues. In recognition of his accomplishments, he was elected a Fellow of the American Orthopsychiatric Association, American Psychological Society, and the American Association for the Advancement of Science. In 1978 he was elected to membership in the National Academy of Education. He is a life member of the National Association of Black Psychologists. As testimony of his accomplishments, Professor Gordon has been honored with numerous awards, including honorary degrees from Yale University (1979), Yeshiva University (1986), Brown University (1989), Bank Street College (1992), and most recently from Mount Holyoke (1994).

Edmund Gordon's work has advanced the field of psychology on three major fronts: human diversity, culture, and pedagogy; resilience among individuals exposed to adverse life circumstances; and knowledge production in the social sciences. Professor Gordon's most far-reaching and enduring contribution to psychology and educational practice is captured in Compensatory Education: Preschool through College, a classic in the fields of human diversity and pedagogy, he and Doxey Wilkerson co-authored. In this book, he articulates the relationship between learner characteristics and theoretical bases for compensatory education. He addresses the status of compensatory education, innovations in school organization and staffing, the importance of extending the school day and year, guidance and counseling services, school-home partnerships, and community involvement programs. The book also provides a critique of compensatory education, including problems in program evaluation. Basing his arguments upon empirical research findings and principles of social justice, Professor Gordon has been at the forefront of efforts to make children's education a national priority and to make our nation's schools responsive to diverse student groups.

Professor Gordon has written and edited major works that have had a significant impact on applications of psychology, particularly concerning the pressing educational issues confronting our nation's public schools. In his seminal work, *Human Diversity and Pedagogy*, which he published with his associates in 1989, he provided a broad-based framework that addresses critical sources of diversity, such as: ethnicity, social class, gender, language background, motivation, identity, physical health, affective responsiveness, cognitive style, and the interaction of these attributes with the school and instructional environment. This volume sharpened the focus of educational and psychological research on the cultural and social correlates of educational success and failure.

Professor Gordon's research on human diversity has significantly contributed to advances in the conceptualization and evaluation of social interventions and the responsiveness of educational practices to the racial, cultural, linguistic, and economic diversity of students. As one of the founders of Project Head Start, his insightful research influenced the philosophy, design, and pedagogy featured in compensatory education programs. He articulated the relationship among young children's cognitive and social development and their diverse familial and cultural backgrounds. Further, the legacy of Professor Gordon's enduring influence on applications of psychology is exemplified by his work on the development of a communication system which was the precursor model for the National Educational Research Information Centers (ERIC). ERIC is the primary information retrieval system of educational literature available to the public, as well as the research and practitioner communities.

A most noteworthy influence of Professor Gordon's work has been his persistence in ensuring that the voice of science be heard in policymaking. In 1994, Professor Gordon was appointed to the National Research Council's Board on Testing and Assessment. He is in his third year of service on the National Academy of Education Panel to study the future of the National Education Assessment Program. In 1995, Professor Gordon was appointed to the National Educational Research, Policy, and Priorities Board convened by the U.S. Department of Education's Office of Educational Research and Improvement. This Board provides direction for the nation's educational research agenda and identifies educational needs that require sustained inquiry, product development, and dissemination. In sum, Gordon's work has sharpened the focus of psychological and educational research and development on the cultural and social correlates of educational success and failure.

In his work on behalf of marginalized children and youth, Professor Gordon has succeeded in influencing some of our nation's most senior scholars and policymakers. Professor Gordon's dedication, scholarly contribution, and commitment to social justice have indeed provided inspiration for many. He has generously given his time, expertise, and wisdom to students and colleagues who have in turn emerged as prominent scientists in their respective fields. His scientific accomplishments, commitment to the profession of psychology, and application of knowledge to improve our capacity for nurturing human diversity and educating children and youth, particularly those in a variety of risk circumstances, inspire all of us to greater scientific achievements that lead to socially beneficial outcomes.

Maynard C. Reynolds is Professor Emeritus of Educational Psychology at the University of Minnesota. He served as the Deforest Strunk Endowed Chair, at the University of San Diego, and the Matthew G. Guglielmo Endowed Chair, at the California State University at Los Angeles. Currently, he is a Senior Research Associate at the Temple University Center for Research in Human Development and Education.

For over 50 years, Professor Reynolds has advanced knowledge through his roles as educator, psycho-educational clinic director, scientist, and child advocate. He is widely acclaimed for his leadership in bringing state-of-the-art research to improve practice in our nation's classrooms. Professor Reynolds has published 26 books and more than 100 articles that have made a fundamental contribution to educational psychology, pedagogy, and special education. He is a former president of the International Council of Exceptional Children and has also received that organization's highest award, the J.E. Wallace Wallen Award for Service to Handicapped Children. Dr. Reynolds was elected a Fellow of the American Association of Mental Deficiency, from which he received the Mildred Thomson Award in 1975. In celebration of his long-time commitment to teachers and the profession of teaching, the Council of Exceptional Children honored Professor Reynolds as the 1987 Teacher Educator of the Year, the most prestigious award given to professors of special education. Dr. Reynolds was also the recipient of two awards from Phi Delta Kappa for his distinguished service to the field.

Dr. Reynolds' research has informed educational practice and policy. His long-term research interests have contributed to new understandings about student diversity, inclusive schooling practices, tailoring instruction to individual differences, restructuring schools to deliver quality services to all students, and educating teachers and school administrators about state-of-the art practices to achieve learning success among children with special needs. His work on the limitations of current practice of categorical service delivery has provided conceptual and practical foundations for national policy on children with special needs, development of professional teaching competencies, and inclusive pedagogical practices. Professor Reynolds is recognized nationally and internationally for his major role in the development of the Education for All Handicapped Children Act of 1975 (PL94-142), which assures that all students with disabilities are provided with appropriate, quality, special education and related services to meet their unique needs. Dr. Reynolds has been a staunch supporter of inclusive approaches to the delivery of these services following the least restrictive environment principle of PL94-142.

Professor Reynolds has been a voice of reason and clarity in assisting our nation's leaders to forge enlightened policies that provide an equitable education for diverse children and youth. In the national dialogue concerning children's rights, he has repeatedly challenged advocates of categorical programs that segregate children with special needs, arguing that schools are accountable for all children's academic performance regardless of their talents or backgrounds. He has pointed out the staggering time and costs required for categorical evaluations and the scientifically indefensible basis of many of these placements. He has cautioned educators about the limitations of such categorical services including: inappropriate placement of children in instructional programs; inequitable racial distributions within categories; stigmatizing effects of labeling children; excessive federal, state, and local regulation; and ineffective coordination and use of service programs.

Dr. Reynolds' proposal to link the funding of educational programs to direct measures of students' performance has been highly influential in the framing of innovative educational policies. His book, *Teaching Exceptional Children in All America's Schools*, co-authored with J. W. Birch, first published in 1977 and re-issued as a second edition in 1982, is a classic in the field. He also co-edited the four volume *Handbook of Special Education: Research and Practice*, now in its second edition. In these and other publications, he has persuasively argued that students with special needs should receive only the amount of specialized placement that is needed, and no more. When students must receive special services, the school system should aim to return students to regular classrooms as soon as possible.

In addition to his contributions to special education, Dr. Reynolds' work has influenced educational practice both in terms of teacher education and the identification of effective inclusive practices. During the 1960s, Professor Reynolds served as a key advisor to Teacher Corps, a nationwide system that brought talented, young teachers into the nation's most undeserved regions in an effort to improve students' chances for schooling success. Dr. Reynolds' knowledge of teacher competencies needed to instruct children in adverse circumstances influenced the design of this vanguard program. In his 1989 book, *The Knowledge Base for the Beginning Teacher*, Professor Reynolds articulated key elements in today's teacher education programs, including the importance of content and pedagogical knowledge and the use of effective practices within an inclusive system of service delivery.

Throughout his distinguished career, Maynard C. Reynolds has been a champion for youngsters with special needs. His singular devotion to providing a quality education for these children and reducing the isolation that often surrounds them has resulted in an impressive legacy of enlightened policies, effective school and classroom practices, and new approaches to teacher education. Perhaps, his most important legacy is manifest in the students, teachers, administrators, researchers, and policymakers who share his vision of inclusive educational practices that serve all children. Professor Reynolds' leadership has changed day-to-day educational practices in classrooms across our nation and has enhanced the lives of many of our most vulnerable schoolchildren by providing them with genuine educational opportunities.